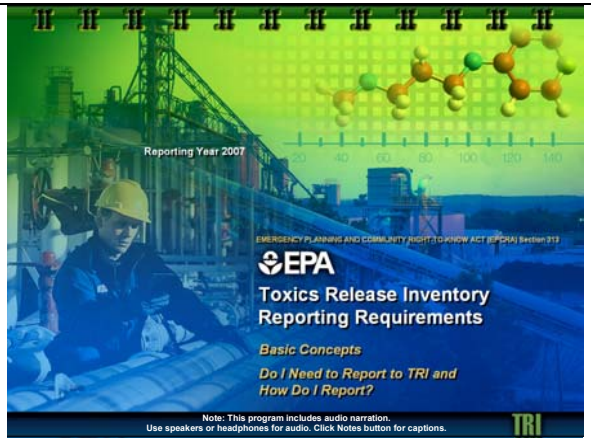
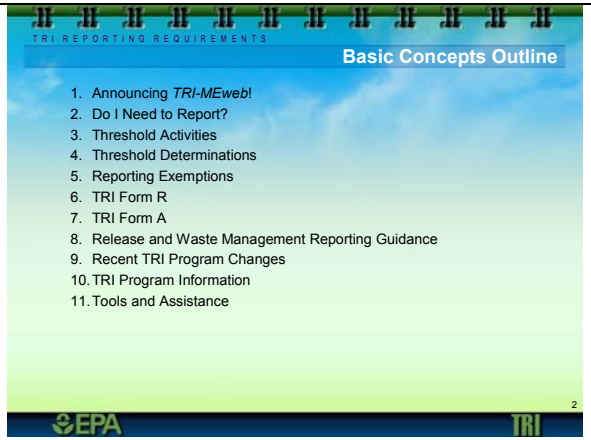
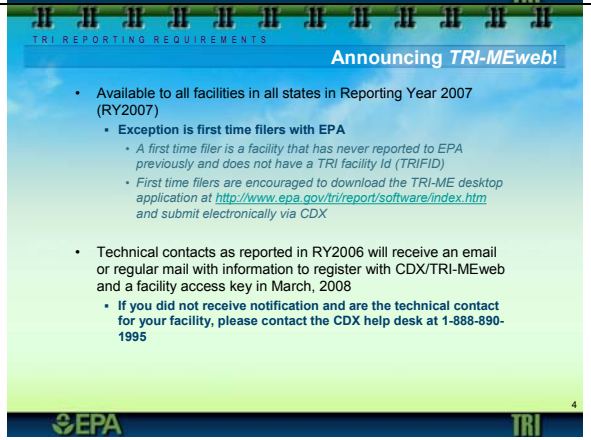
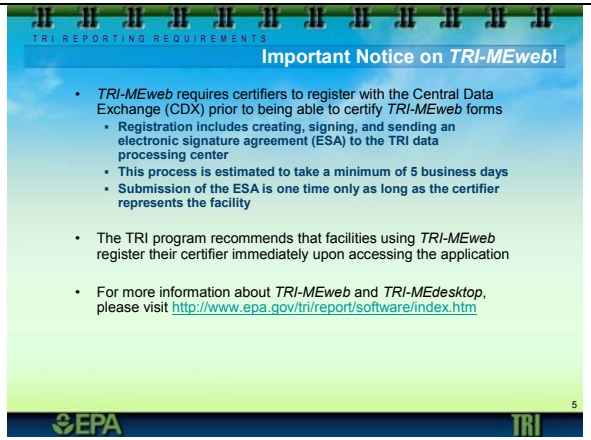

Reporting Year 2007
20
40
60
80
100
120
140
EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA) Section 313
EPA
Toxics Release Inventory
Reporting Requirements
Basic Concepts
Do I Need to Report to TRI and
How Do I Report?
Note: This program includes audio narration.
Use speakers or headphones for audio. Click Notes button for captions.
TRI

Slide 1 **Welcome Screen** Duration: 00:00:49		**Notes:** Welcome to the Emergency Planning and Community Right-to-Know Act, Section 313, Toxics Release Inventory online training for the 2007 reporting year. This is the Basic Concepts Module of a two part training course that is made up of this module and an Advanced Concepts module. The Basic Concepts module will walk you through the process of determining whether or not your facility is required to report to the Toxics Release Inventory, or TRI, and if so, how you actually prepare and submit information to TRI. The Advanced Concepts module assumes a basic understanding of the TRI requirements and focuses on key concepts that will help to ensure accurate TRI reporting.
Slide 2 **Basic Concepts Outline** Duration: 00:01:06		**Notes:** In this module we'll first introduce a new TRI reporting tool – TRI-ME web – that is the next generation of TRI Made Easy reporting software. We'll also provide a brief overview of the TRI program and help you determine whether or not your facility is covered by TRI. We'll look at the TRI chemical list, and we'll help you determine whether or not your facility exceeded any of the activity thresholds for these chemicals, which would trigger TRI reporting. Next, we'll cover a number of exemptions to TRI reporting that might apply to your facility, and we will look at the Form R and Form A, which are the two reporting options under TRI. Then, we will provide some guidance aimed at ensuring accurate reporting. Finally, we'll cover recent changes and other key information related to the TRI program and how you can get additional information and assistance with TRI requirements.

Slide 3 **Section I: Announcing TRI-MEweb!** Duration: 00:00:05		
Slide 4 **Announcing TRI-MEweb!** Duration: 00:00:59		**Notes:** TRI-ME web is the next generation of software for completing and submitting TRI forms. TRI-ME web is now available to all facilities for reporting year 2007 provided your facility has filed to TRI in the past and has a TRI facility ID. If your facility is reporting to TRI for the first time, you are encouraged to download and use the TRI-ME desktop application available from the website shown here. Facilities need a facility access key to register for TRI-ME web and submit their reports via the Central Data Exchange, or CDX. Access keys were sent to TRI technical contacts via email and regular mail in March of this year. If you did not receive an access key for your facility, contact the CDX help desk at the toll free number shown here.

Slide 5
Important Notice on TRI-MEweb!
Duration: 00:00:55

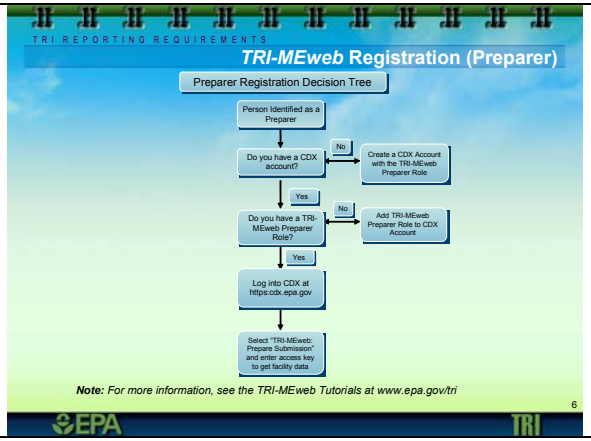


Notes:

Certifiers of TRI forms submitted via TRI-ME web must first register with EPA's Central Data Exchange. Registration includes creating, signing, and mailing and electronic signature agreement, or ESA, to the TRI data processing center. Facilities should identify their certifiers and complete the registration process as soon as possible because this process will take at least 5 business days. Note that the submittal of an ESA is a new requirement beginning this year, but it only needs to be done once, as long as the certifier represents the facility.

For more information about the TRI-ME web or the TRI-ME desktop application, including web-based tutorials, visit the TRI website shown here.

Slide 6
TRI-MEweb Registration (Preparer)
Duration: 00:00:26



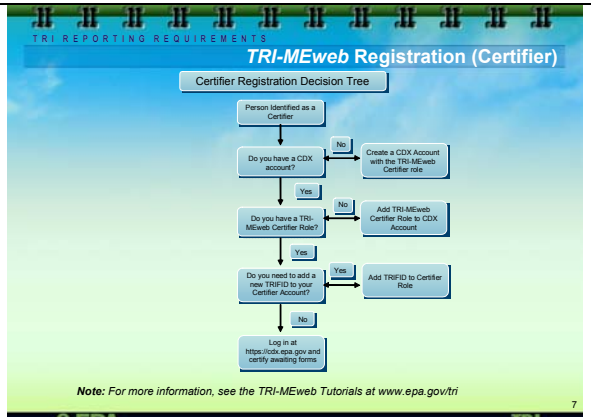
Notes:

Those wishing to use TRI-ME web to prepare and submit their TRI submissions must have BOTH an account with EPA's Central Data Exchange AND have added the TRI-ME web preparer role to their CDX account. This decision tree can help you determine which of these requirements apply to you and ensure that you will be able to access your facility data in TRI-ME web.

Slide 7

TRI-MEweb Registration (Certifier)

Duration: 00:00:39



Notes:

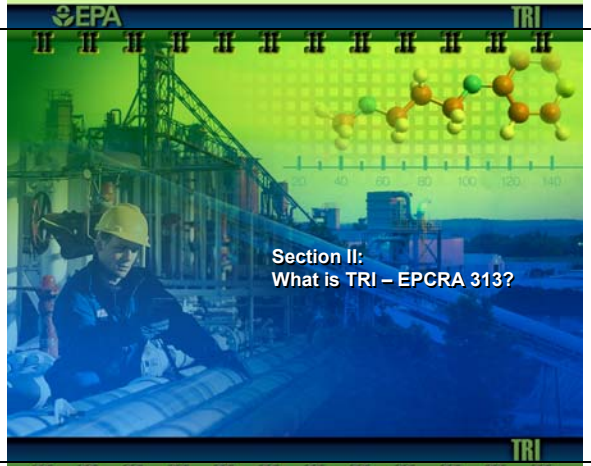
Those certifying TRI forms submitted via TRI-ME web must also have BOTH a CDX account and have added the TRI-ME web certifier role to their CDX account. Again, this decision tree can help you identify and complete the necessary steps needed to log into the CDX and certify awaiting forms.

Note that there is more assistance available for preparers and certifiers using TRI-ME web at the EPA TRI program homepage at www.epa.gov/tri.

Slide 8

Section II: What is TRI – EPCRA 313?

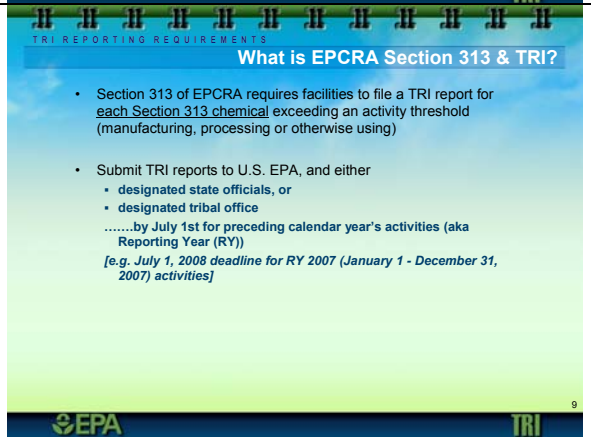
Duration: 00:00:05



Slide 9

What is EPCRA Section 313 & TRI?

Duration: 00:00:51



Notes:

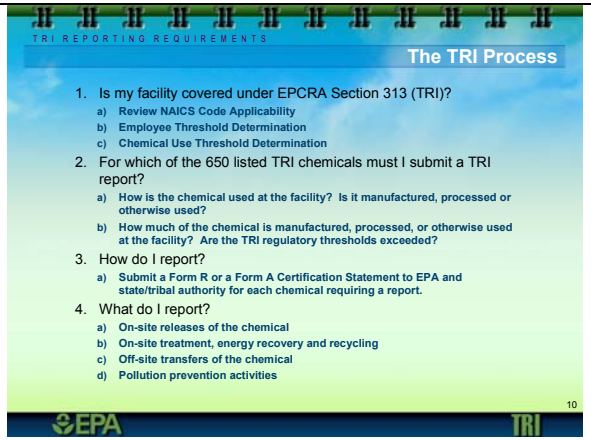
Now let's look at the basic requirements of Toxic Release Inventory reporting. What is TRI? The Toxic Release Inventory was established by Section 313 of the Emergency Planning and Community Right to Know Act, or EPCRA 313. Facilities that are covered under EPCRA 313 must complete a TRI chemical form for each TRI chemical for which they've exceeded an activity threshold. TRI reports must be sent to the United States EPA and your designated state or tribal authority.

These reports are due by July 1st for the preceding calendar year's activities. So for the calendar year of 2007, TRI reports are due by July 1st of 2008.

Slide 10

The TRI Process

Duration: 00:02:10



Notes:

A stepwise process can be used to determine if and what you would need to report to TRI. The first step is determining whether or not your facility is covered under EPCRA Section 313 and would, therefore, need to consider its toxic chemicals for TRI reporting. Whether or not your facility is covered is based on the types of activities carried out at the facility and the number of employees working for your facility. NAICS is the North American Industrial Classification System, which assigns numeric codes to characterize the activity taking place at the facility. We will talk more about the NAICS codes requirement shortly.

The next step is to determine for which TRI chemicals you must submit a TRI report. Covered facilities need to look at the TRI chemicals that are on the list and that may be present at the facility. Next, facilities need to look at how the chemicals are used. Are they manufactured? Processed? Or otherwise used? These are the TRI threshold activities. We will be describing each of these in more detail.

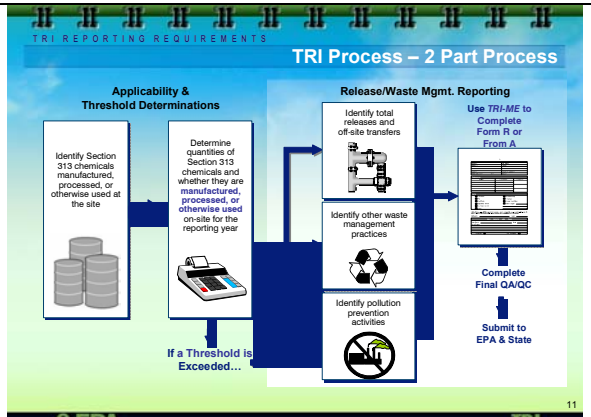
Next, facilities must calculate the quantity of the TRI chemical that is manufactured, processed, or otherwise used, and compare those quantities to the TRI activity thresholds. Only when activity thresholds are exceeded would the facility be required to complete and submit a TRI report, either a Form R or a Form A.

What information do facilities report to TRI? For the Form R, which is the more common means of TRI reporting, facilities report on how the TRI chemical is managed as waste, including onsite releases, treatment, energy recovery, recycling of the TRI chemical and offsite transfers, and pollution prevention activities that are conducted at the facility for that chemical.

Slide 11

TRI Process – 2 Part Process

Duration: 00:00:35



Notes:

Complying with the TRI requirements can be looked at as a two part process. The first part, shown on the left, involves determining if your facility is required to report to TRI, and if so, for which chemicals you would need to submit a report. The second part, shown on the right, is the actual release and waste management reporting. This is the information that you would put on a TRI form.

We will be covering both parts of the process in this Basic Concepts module.

Slide 12

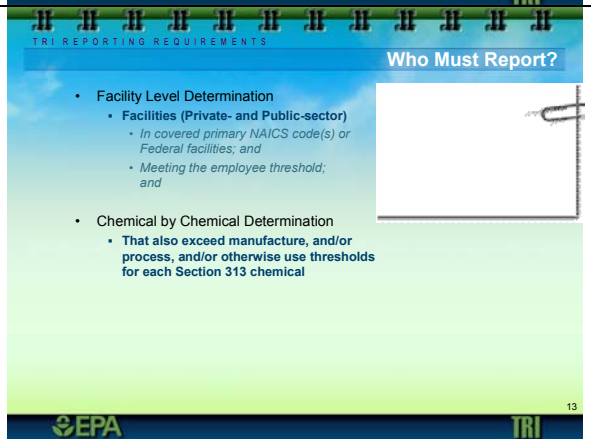
Section III: Who Must Report?

Duration: 00:00:05

Slide 13

Who Must Report?

Duration: 00:01:11



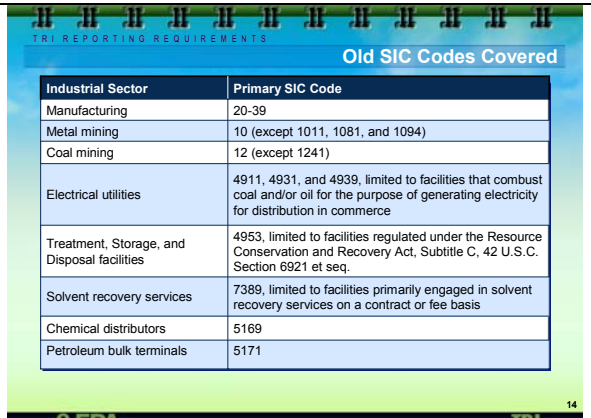
Notes:

Let's look in more detail at who must report to TRI. TRI reporting is done at the facility-level. Facilities must determine whether they need to report to TRI and, if so, facilities complete and submit the proper forms. Covered facilities can either be in the private or public sector. For private sector facilities, only facilities with certain primary North American Industrial Classification System codes are required to report. For public sector facilities, federal facilities owned or operated by the Executive Branch Agencies are covered regardless of their NAICS code.

Slide 13 - Continued
Who Must Report?
Duration: 00:01:11

Notes:
Facilities, both private and public sector, must have at least 10 full-time employees to be covered under TRI. Coming up, we'll talk about each of these requirements in more detail. Again, for those facilities that are covered by TRI, only those that have exceeded either manufacturing, processing, or otherwise use thresholds for TRI chemicals will be required to report.

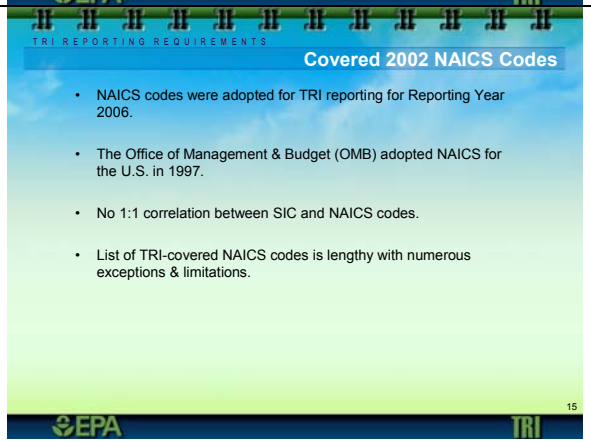
Slide 14
Old SIC Codes Covered
Duration: 00:00:38



Industrial Sector	Primary SIC Code
Manufacturing	20-39
Metal mining	10 (except 1011, 1081, and 1094)
Coal mining	12 (except 1241)
Electrical utilities	4911, 4931, and 4939, limited to facilities that combust coal and/or oil for the purpose of generating electricity for distribution in commerce
Treatment, Storage, and Disposal facilities	4953, limited to facilities regulated under the Resource Conservation and Recovery Act, Subtitle C, 42 U.S.C. Section 6921 et seq.
Solvent recovery services	7389, limited to facilities primarily engaged in solvent recovery services on a contract or fee basis
Chemical distributors	5169
Petroleum bulk terminals	5171

Notes:
This table of SIC codes shows the private sector industries that are covered by TRI. Prior to reporting year 2006, industries covered by TRI defined by their primary Standard Industrial Classification codes. The covered sectors include: manufacturing; portions of metal mining; portions of coal mining; certain electric utilities; treatment, storage, and disposal facilities; solvent recovery facilities chemical distributors; and petroleum bulk terminals.

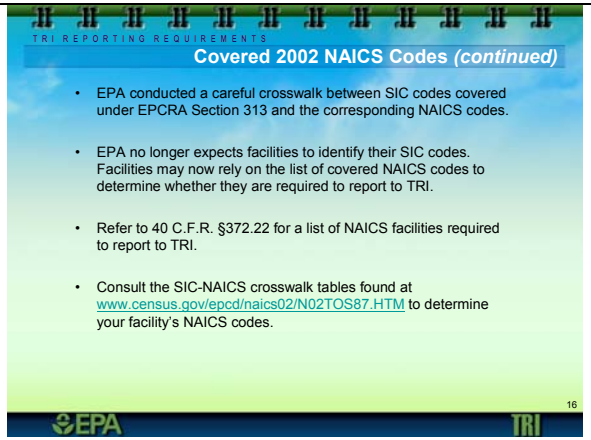
Slide 15
Covered 2002 NAICS Codes
Duration: 00:00:46



Notes:
The US Office of Management and Budget adopted NAICS codes to replace the SIC Code System in 1997 and, in reporting year 2006, the TRI program began using the NAICS codes developed in 2002 to define which facilities are covered under TRI. In addition, the TRI forms now require that facilities report the NAICS codes that represent their facility's industry sector.

There is no one-to-one correlation between the old SIC code system and NAICS codes. The list of TRI-covered NAICS codes is rather lengthy. And it does include a number of exceptions and limitations.

Slide 16
Covered 2002 NAICS Codes (continued)
Duration: 00:00:51

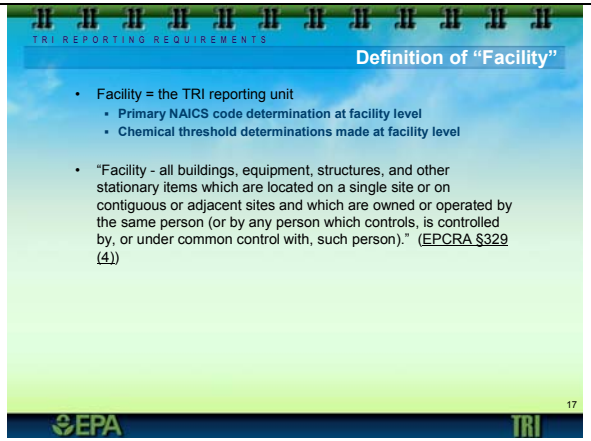


Notes:

EPA conducted a careful crosswalk of the covered SIC codes to the 2002 NAICS codes. Therefore, facilities that were covered by TRI under previous years based on their SIC code classifications will also be covered under the NAICS code classifications. SIC codes are no longer necessary to determine whether your facility is covered by TRI. Instead, facilities can rely on the list of NAICS codes that is published in Chapter 40 Section 372.22 of the Code of Federal Regulations.

To identify your facility's NAICS codes using its SIC codes, facilities can access a crosswalk between the old SIC code system and the new NAICS codes at the website shown here.

Slide 17
Definition of "Facility"
Duration: 00:01:21

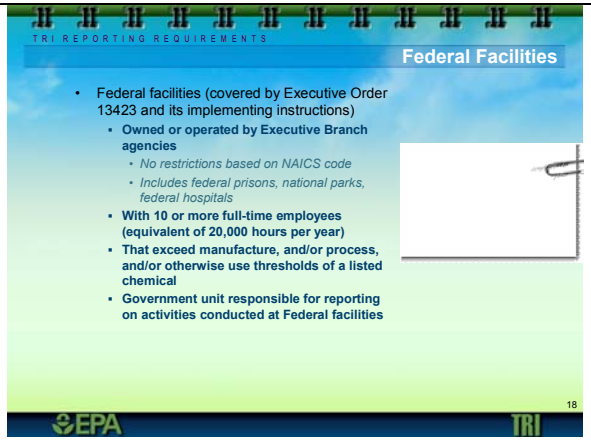


Notes:

As previously mentioned, the reporting unit under TRI is the facility. Primary NAICS codes determinations and employee threshold determinations are made at the facility level. Chemical threshold determinations are also made at the facility level. Therefore, the definition of a facility under TRI is very important. EPA defines a facility as "all buildings, equipment, structures, and other stationary items which are located on a single site or contiguous or adjacent sites and which are owned or operated by the same person (or by any person which controls, is controlled by, or under common control with such person)."

A key point here is that establishments or operations owned or operated by the same company or federal agency that are contiguous or adjacent are considered a single facility under TRI. In some instances, a single site or adjacent properties may be have multiple and distinct establishments, each considered to be a unique and separate economic unit. Together, these establishments comprise a single facility under TRI if they are owned or operated by the company or agency.

Slide 18
Federal Facilities
Duration: 00:00:50

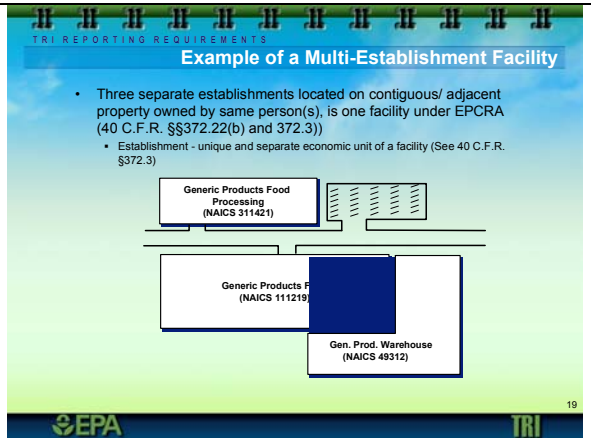


Notes:

Federal facilities may also be covered by TRI. These are facilities that are owned or operated by the Executive Branch agencies. There are no restrictions based on NAICS codes for Federal facilities. So, any Federal facilities, such as prisons, national parks, or hospitals, could be covered under TRI.

Federal facilities also need to have 10 or more full time employees to be covered by TRI. And, to be required to submit a TRI report, they would need to exceed one or more of the activity thresholds for the TRI chemicals present at the facility. The federal agency or department that owns or operates the facility is responsible for determining whether or not it is required to report.

Slide 19
Example of a Multi-Establishment Facility
Duration: 00:00:54

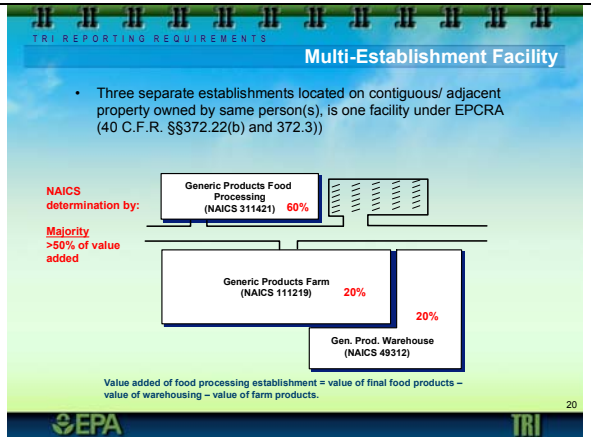


Notes:

We mentioned that establishments are unique economic units within a facility. In the facility shown here, there are three unique establishments. There is a food processing establishment, a farm, and a warehouse. These establishments are all owned by the same company and are located at adjacent or contiguous sites and, therefore, are together considered a single facility under TRI. However, only the NAICS code of the processing establishment is a covered NAICS code under TRI.

Whether or not this facility would be covered by TRI in part depends upon which of the establishment's NAICS codes becomes the primary NAICS code of the entire facility. The primary NAICS code for the facility is determined by the economic value provided by each of the establishments.

Slide 20
Multi-Establishment Facility
Duration: 00:00:50

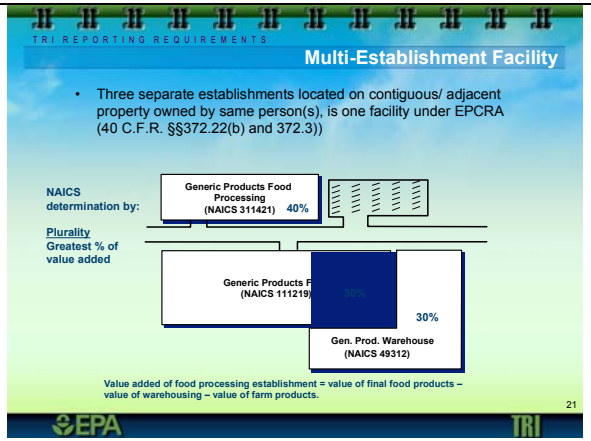


Notes:

If any of these establishments contributes the majority of the economic value, or 'value added', of the facility, the NAICS code for that establishment would become the primary NAICS code for the entire facility. Essentially, 'value added' can be thought of as the value of the services the establishment provides, or the value of the products leaving the establishment less the value of the materials entering the establishment.

In this case, the processing facility, NAICS code 311421, comprises 60% of the 'value added' for the entire facility. The farm and the warehouse each comprise 20%. Therefore, the primary NAICS code for the entire facility is 311421.

Slide 21
Multi-Establishment Facility
Duration: 00:00:30



Notes:

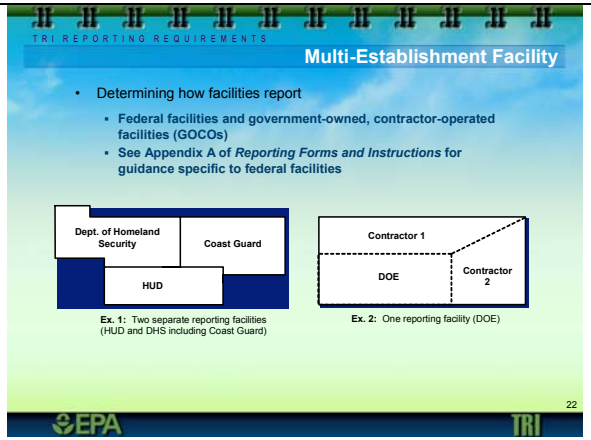
If no establishment contributes the majority of the value added, the primary NAICS code for the facility becomes that of the establishment that has the largest percent of the value added. In this case, the processing facility of NAICS code 311421 comprises 40% of the value added, whereas the farm and the warehouse each comprise 30%. In this case, based on the plurality, the processing NAICS code again becomes the NAICS code for the entire facility.

Because the processing NAICS code is one that is covered under TRI, the entire facility would need to consider its employee thresholds and chemical use.

Slide 22

Multi-Establishment Facility

Duration: 00:02:03



Notes:

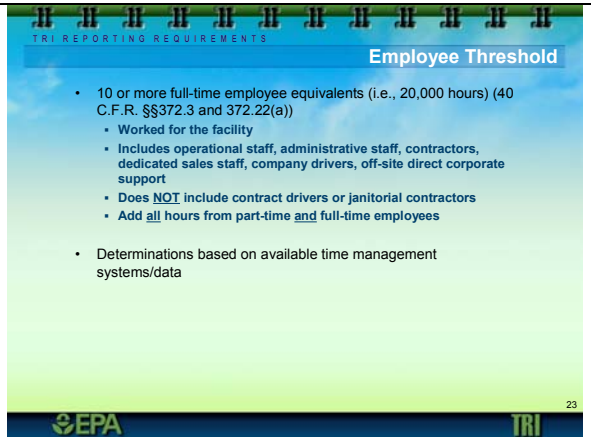
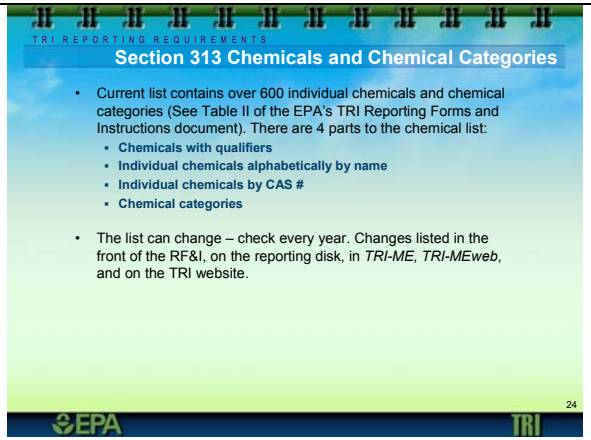
Federal facilities can also be made up of multiple establishments. Let's look at a couple of examples where we have multiple establishment Federal facilities that might be required to report under TRI.

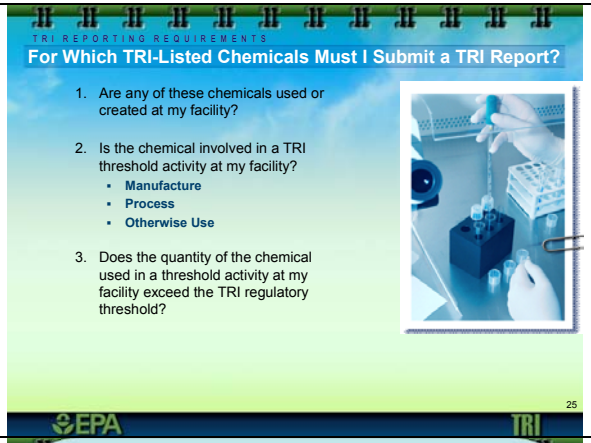
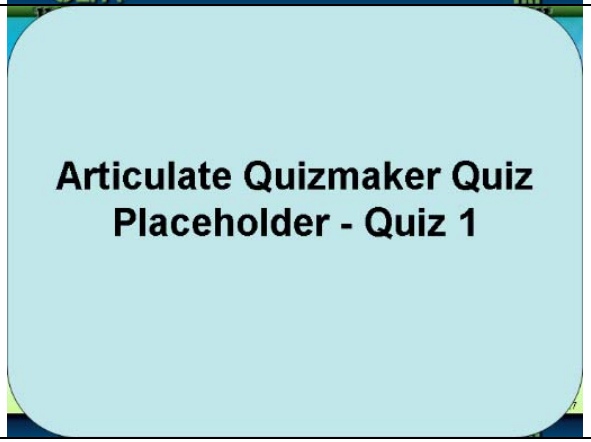
In the example on the left, there are three separate government establishments operating independently on the same or adjacent properties. There is the Department of Homeland Security, the Coast Guard, and the Department of Housing and Urban Development. Under TRI, these establishments would fall under two separate facilities. One facility would be made up of the HUD establishment.

The other facility would be made up of the Coast Guard and Department of Homeland Security establishment. The Coast Guard is part of DHS and, therefore, DHS is the parent agency for the Coast Guard. Assuming there are 10 or more full-time employees working for the facility, DHS would then be responsible for identifying and quantifying the TRI chemical use at both the DHS and Coast Guard establishments and applying that towards the activity thresholds for the entire facility. Likewise, HUD would also be responsible for identifying all the chemicals at the HUD facility and applying that towards their activity thresholds.

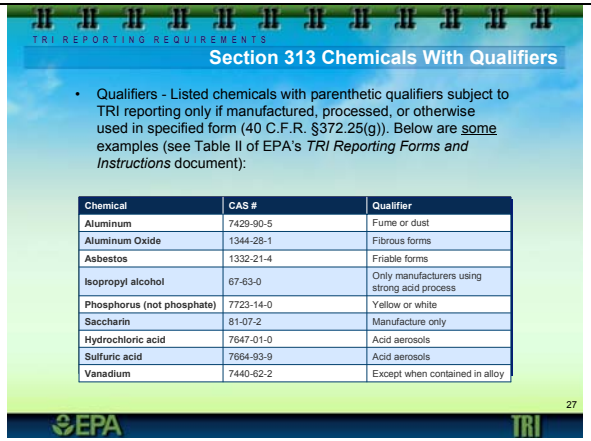
In the example on the right, there is a single Federal agency and two contractors operating independently at the same facility. In this case, the three establishments would be considered a single facility and DOE, as the parent agency, would be responsible for quantifying the toxic chemicals use at the entire facility and applying that towards the activity thresholds.

In both examples, while threshold determinations must be done at the facility level, any subsequent reporting required could be done by each of the establishments separately.

Slide 23 **Employee Threshold** Duration: 00:00:56		**Notes:** For private sector facilities that have determined that they meet the primary NAICS code requirements and Federal facilities, the next step is to determine whether or not they meet the employee threshold requirement. As mentioned, facilities with 10 or more full-time employees are covered by TRI. 10 or more full-time employees is defined as 20,000 hours worked at or for the facility. This includes operational staff, administrative staff, contractors, sales staff, drivers, and off-site corporate support. The only thing it doesn't include is contracted drivers and contracted janitorial services. Facilities need to add up all of the hours, both part-time and full-time, worked at their facility, and apply that towards this 20,000 hour threshold.
Slide 24 **Section 313 Chemicals and Chemical Categories** Duration: 00:01:02		**Notes:** So what are the TRI chemicals? The current TRI chemical list contains over 600 individual chemicals and chemical categories. The list can be found in EPA's Reporting Forms and Instructions in Table II, which is available on the TRI website and through the TRI-ME reporting software. There are four parts to the chemical list. First is a list of the chemicals with their qualifiers. These chemicals are listed alphabetically by name. They're also listed by their CAS number or chemical abstract number. There is also a list of chemical categories. Coming up we will go over the differences between individual chemicals and chemical categories in more detail. Be aware that the TRI chemical list can changes from year to year. Make sure that you're always using the most current TRI chemical list.

Slide 25 **For Which TRI-Listed Chemicals Must I Submit a TRI Report?** Duration: 00:00:33		**Notes:** For Federal facilities and private sector facilities with covered primary NAICS codes, having 10 or more full time employees, the next step is to determine whether or not there are TRI chemicals present at the facility; whether or not these chemicals are involved in any of the threshold activities, manufacturing, processing, and otherwise use; and whether or not the quantity of the chemical involved in the threshold activity over the reporting year exceeds the TRI reporting threshold.
Slide 26 **Quiz 1** Duration: 00:02:00		

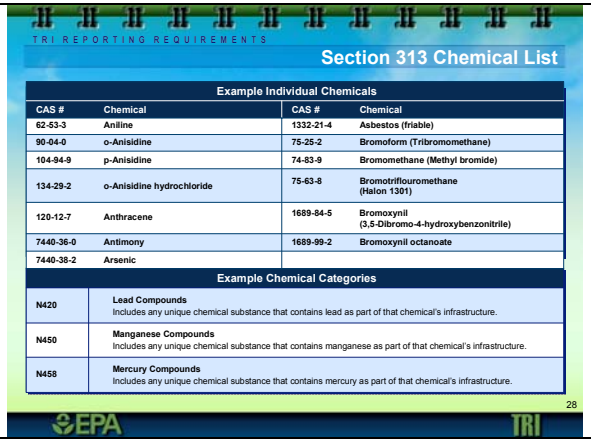
Slide 27
Section 313 Chemicals With Qualifiers
Duration: 00:01:22



Notes:

Many of the listed TRI chemicals have parenthetic qualifiers. These chemicals are only subject to TRI reporting if they are manufactured, processed, or otherwise used in the specific form described in the qualifier. The tables shown here are just some of the qualifiers for TRI chemicals. For example, the first one, aluminum, has the qualifier 'fume or dust'. This means that aluminum would only be considered under TRI in the fume or dust form. Isopropyl alcohol is another example. It would only need to be considered under TRI if the facility is manufacturing isopropyl alcohol and using a process called the 'strong acid process'. Another example is sulfuric acid, which is only considered under TRI in an acid aerosol form. Facilities that have aqueous sulfuric acid which are not aerosolizing the acid in any way would not need to consider their sulfuric acid towards the threshold or reporting. These are just some of the qualifiers on the TRI chemical list. Facilities should always be sure to be aware of the chemical qualifiers associated with the chemicals that may be present at their facility.

Slide 28
Section 313 Chemical List
Duration: 00:00:15



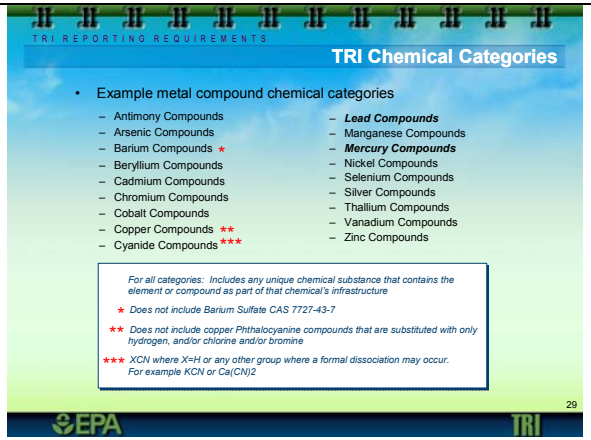
Notes:

Here are some additional examples of TRI chemicals and chemical categories from the TRI chemical list. As we mentioned, the list includes the chemical name and its chemical abstract number or chemical category code.

Slide 29

TRI Chemical Categories

Duration: 00:01:09



Notes:

Facilities need to take care in identifying chemicals used or generated at their facility that may fall within a TRI chemical category group. Chemical categories are groups of individual chemicals which must be considered together towards activity thresholds and reporting under TRI.

Many chemical categories are metal compound chemical categories some of which are show here. In many cases, the elemental forms of the metal are also reportable as a separately listed TRI chemical.

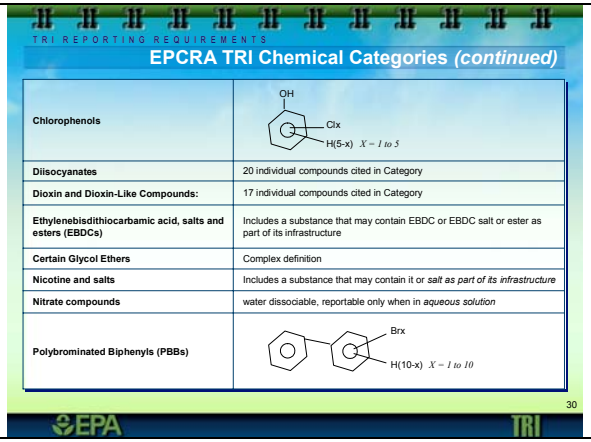
Let's look at lead compounds as an example. Any unique chemical substance that contains lead as part of its chemical infrastructure would be considered part of the lead compounds chemical category.

Note that some of these chemical categories also contain qualifiers. For example, in the case of barium compounds, the category does not include barium sulfate; however, all other barium compounds would need to be considered toward this chemical category.

Slide 30

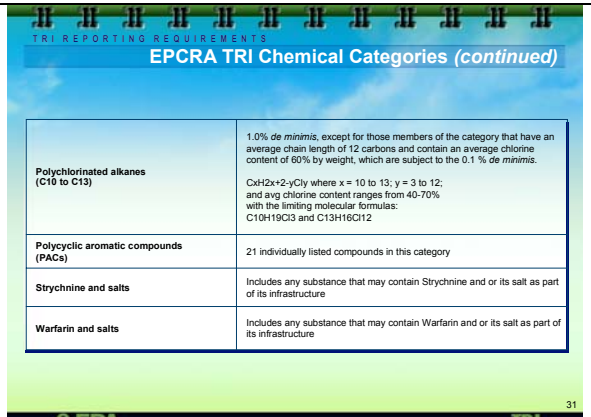
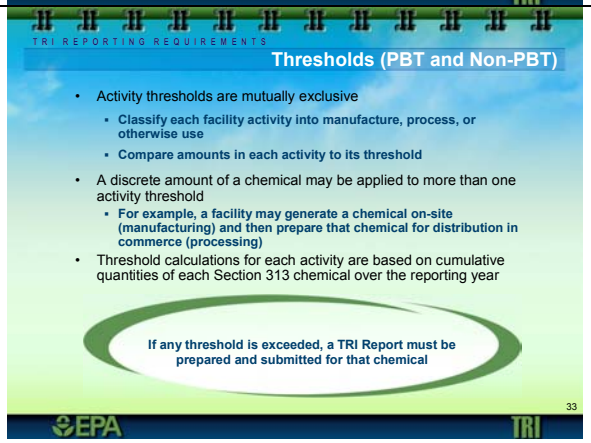
EPCRA TRI Chemical Categories (continued)

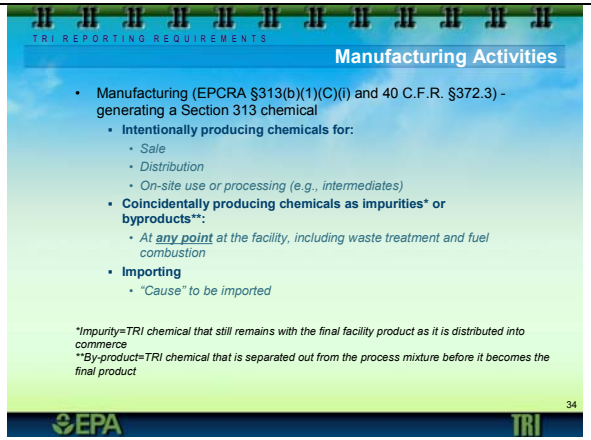
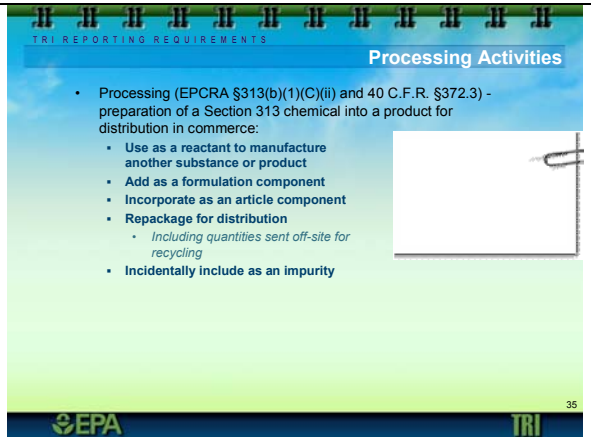
Duration: 00:00:30



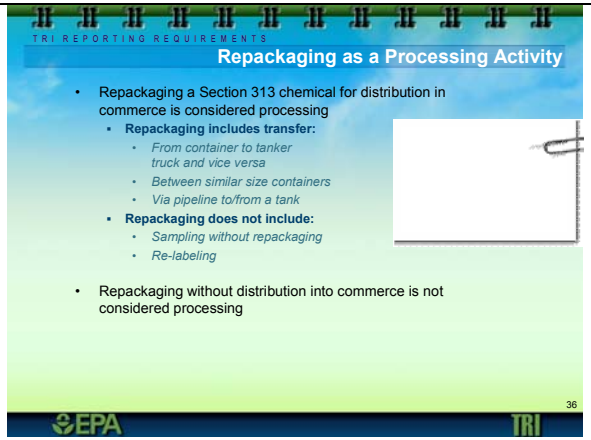
Notes:

Organic chemicals can also be grouped into chemical categories under TRI. In some cases, the category is defined as a general class of chemicals, for example, in the case of chlorophenols. And in other cases, there is a list of individual chemicals that makes up the chemical category. In the case of dioxin and dioxin-like compounds, there are 17 individual compounds that make up the chemical category.

Slide 31 **EPCRA TRI Chemical Categories (continued)** Duration: 00:00:08		**Notes:** These are some additional organic chemical categories. And note the qualifiers associated with many of these.
Slide 32 **Section IV: Threshold Determinations** Duration: 00:00:05		**Notes:**
Slide 33 **Threshold Determinations** Duration: 00:01:03		**Notes:** As previously mentioned, TRI reporting is only triggered when a facility exceeds one or more of the three activity thresholds: manufacturing, processing, and otherwise use. Facilities must quantify the amount of each TRI chemical and chemical category involved in each of these three activities. Then, compare the amounts to the thresholds. In some cases the same discrete amount of a TRI chemical can go through more than one threshold activity. In such cases, the chemical must be counted towards each threshold activity.

Slide 33 - Continued **Threshold Determinations** Duration: 00:01:03		**Notes:** Remember that threshold calculations are based on cumulative quantities of each TRI chemical over the reporting year. If a threshold is exceeded for any of the threshold activities, then a TRI report must be prepared and submitted for that chemical. Now, let's look at each of the three threshold activities in more detail.
Slide 34 **Manufacturing Activities** Duration: 00:00:55		**Notes:** The first is manufacturing. Manufacturing includes intentionally producing the TRI chemical because that is what your facility does – either manufactures the TRI chemical for sale or distribution – or manufactures it to be used on-site in another process. Chemicals can also be coincidentally manufactured, in which case the chemical is not intentionally manufactured but it is created as an impurity or byproduct in the process. Coincidentally manufacturing a TRI chemical can happen at any point in the facility, including in waste treatment and when combusting fuels. Importing of a TRI chemical, or causing a TRI chemical to be imported into the United States, is also considered to be a manufacturing activity under TRI.
Slide 35 **Processing Activities** Duration: 00:00:60		**Notes:** The next threshold activity is processing. Processing of a TRI chemical involves distributing a TRI chemical into commerce. This can be done either as a reactant in the manufacturing of another substance which is distributed into commerce, or it could be that the TRI chemical is being added as a formulation or article component to a product which is then distributed into commerce. Repackaging of a TRI chemical with subsequent distribution into commerce also is a processing activity under TRI. Note that, under TRI, processing also includes sending a TRI chemical off-site for recycling. Finally, processing may also include the unintentional processing of a TRI chemical if it appears as an impurity in a raw material that your facility uses and which leaves the facility in the product.

Slide 36
Repackaging as a Processing Activity
Duration: 00:01:24



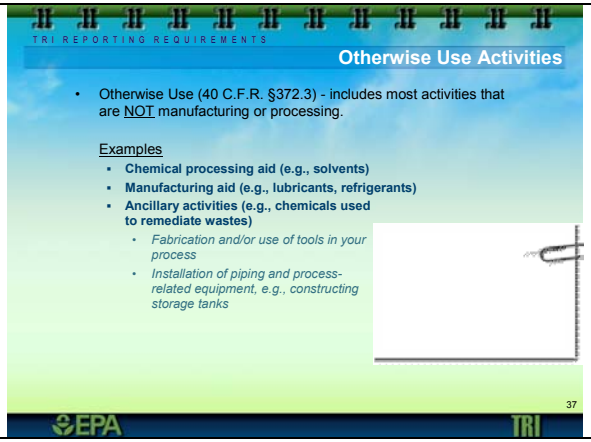
Notes:

Let's look at repackaging in more detail. Any repackaging of a TRI chemical for distribution in commerce is considered processing. Repackaging could be from any type of container to any other type of container. The containers could be similar sizes, or they could be very different such as pipelines into tanks or vice-versa.

As long as the TRI chemical is going from one container to another and then is being distributed into commerce, the chemical would be considered processed under TRI. Repackaging does not include taking samples from containers for the purposes of quality assurance and it does not include simple re-labeling of a container. As long as the TRI chemical stays within the container, placing a label on the container itself would not be considered repackaging.

Any repackaging without distribution into commerce would not be considered processing. For example, TRI chemicals contained in a 55 gallon drum that are placed into smaller containers and distributed around the facility to be used at the facility and which are not being distributed into commerce would not be considered towards the processing thresholds.

Slide 37
Otherwise Use Activities
Duration: 00:00:38

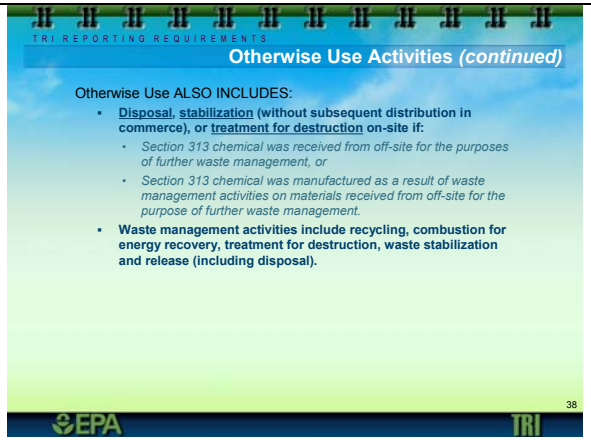


Notes:

'Otherwise use' includes most activities that are not considered manufacturing or processing. Chemicals that are otherwise used include chemical processing aids like solvents, manufacturing aids like lubricants, refrigerants, or catalysts. Otherwise use often includes ancillary activities, chemicals that are used, for example, to remediate wastes or chemicals that are used to clean process equipment.

Chemicals that are contained within tools or other equipment at the facility would be considered otherwise used.

Slide 38
Otherwise Use Activities (continued)
Duration: 00:00:44

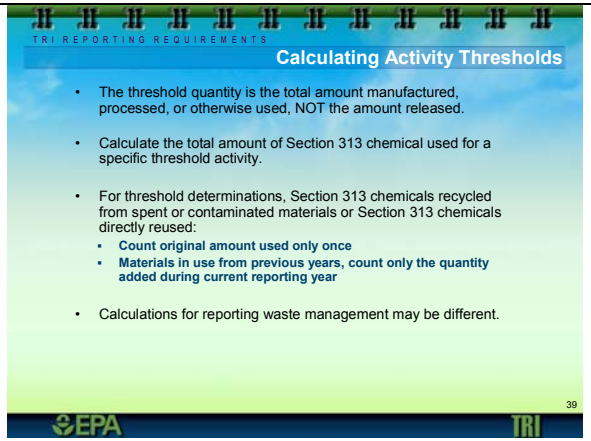


Notes:

Otherwise use also includes any disposal, stabilization, or treatment for destruction of a TRI chemical if the chemicals are received from off-site for the express purposes of further waste management.

In addition, TRI chemicals that are manufactured as a result of waste management activities on any material that is received from off-site for the purpose of waste management would be considered towards your otherwise use threshold. Under TRI, waste management activities include recycling, combustion for energy recovery, treatment for destruction, waste stabilization and release to the environment, including disposal.

Slide 39
Calculating Activity Thresholds
Duration: 00:00:53



Notes:

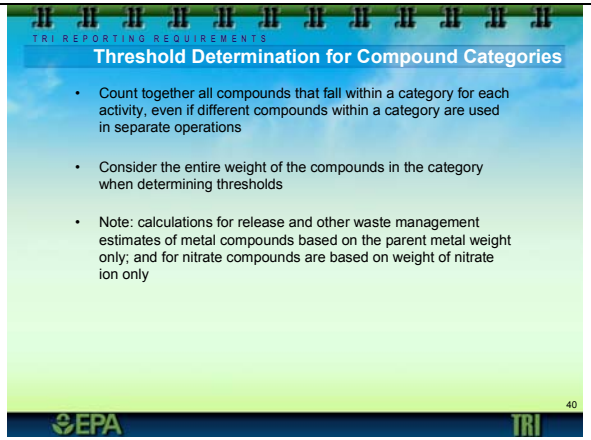
When calculating activity thresholds, facilities must remember that the threshold quantity is the total amount of the chemical that is manufactured, processed, or otherwise used over the reporting year. It is not the amount of TRI chemical that was released or managed as waste. Remember to apply the total amount of the chemical to each activity threshold including all threshold activities at the facility. If your facility reuses or reclycles TRI chemicals over and over through the reporting year, only the original amount is counted towards the activity thresholds plus any amount that was added during the year.

Note that it is not critical to calculate the threshold quantity exactly; however, it is important to know whether or not you have exceeded the threshold.

Slide 40

Threshold Determination for Compound Categories

Duration: 00:00:39



Notes:

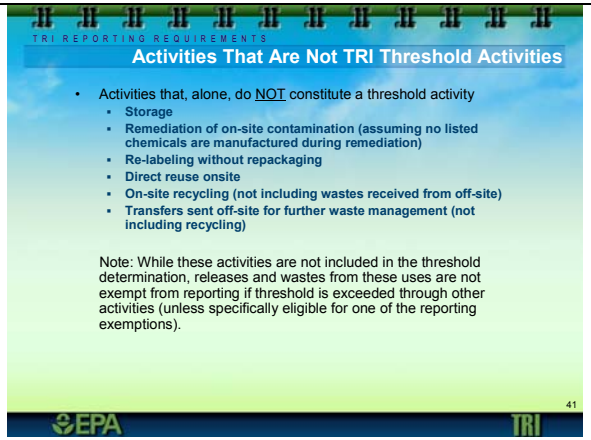
When determining thresholds for chemical categories, be sure to count all the compounds that fall within the category. Even if they're different compounds used in different operations around your facility. Apply the entire weight of the compounds in the category when determining your thresholds quantities.

Note that while the weight of the entire compound must be applied to the threshold for the chemical category, releases and other waste management estimates for Form R reporting have different requirements for metal and nitrate compounds. These reporting requirements are discussed in detail later in this module.

Slide 41

Activities That Are Not TRI Threshold Activities

Duration: 00:01:35

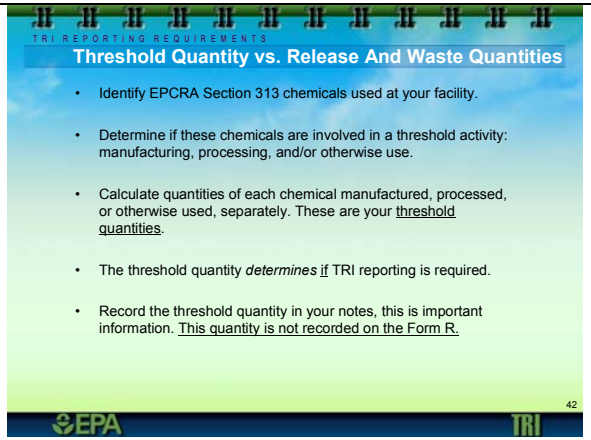
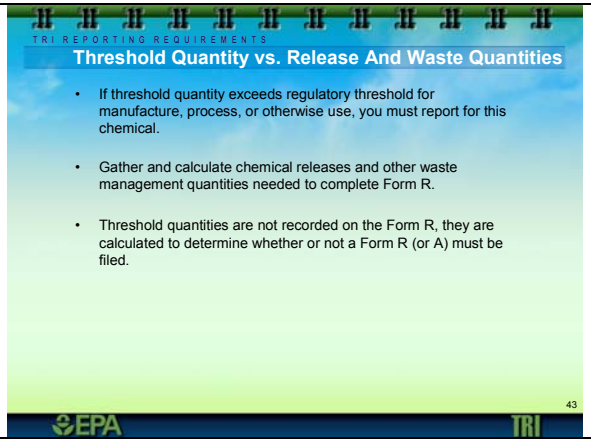


Notes:

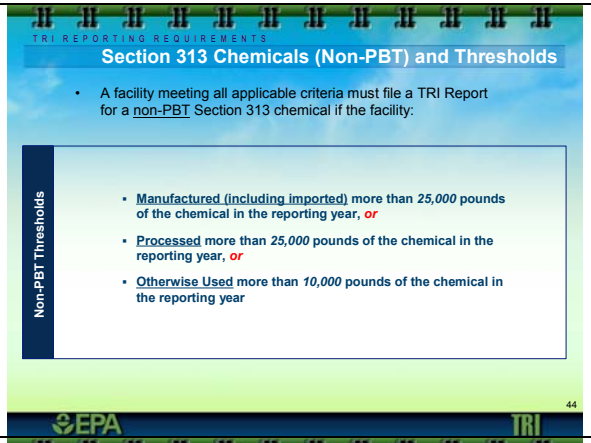
There are some activities that are not considered to be threshold activities under TRI. In other words, the activities are not considered manufacturing, processing, or otherwise use. For example, storage. In itself, storage of a TRI chemical would not need to be considered towards an activity threshold. Remediation of on-site contamination would not be considered a threshold activity as long as the waste was on-site and not brought in from off-site for the purposes of waste treatment, or waste management.

As mentioned, re-labeling of a container without repackaging is not considered a threshold activity. Directly reusing a TRI chemical on-site and any on-site recycling of a TRI chemical are not considered threshold activities. Transferring of a TRI chemical off-site for further waste management, not including offsite recycling, is not considered a threshold activity.

None of the TRI chemicals associated with these activities would need to be considered towards an activity threshold. However, if a TRI chemical threshold was exceeded in some other manner at your facility, a TRI form would be required for that chemical. Any release and waste management reporting for that chemical would need to include any releases or other waste management associated with all activities, including those shown here.

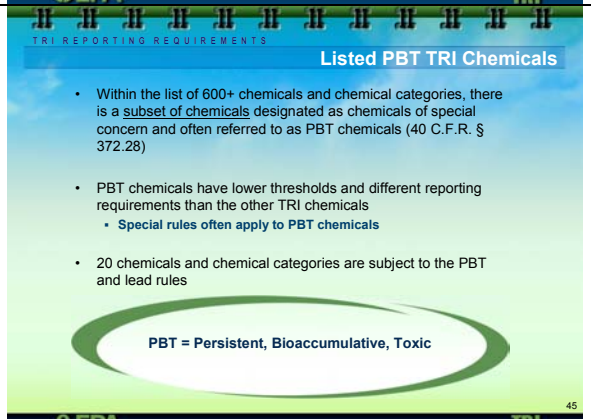
Slide 42 **Threshold Quantity vs. Release And Waste Quantities** Duration: 00:01:03		**Notes:** Now, we will summarize the difference between threshold quantity determinations and the release and waste management quantity estimates for TRI reporting. The TRI reporting process first involves identifying the chemicals present at your facility that are on the TRI chemical list. Next you identify those chemicals that are involved in a threshold activity, either manufacturing, processing, or otherwise use. Next you calculate the quantity of each chemical that is manufactured, processed, or otherwise used. This is done separately for each threshold activity. The threshold quantities are what determine whether or not reporting to TRI is required. The quantity itself is not reported on the TRI form. It's important to keep notes and records of those quantities and the calculations used, but again, it does not get reported on the TRI form.
Slide 43 **Threshold Quantity vs. Release And Waste Quantities** Duration: 00:00:34		**Notes:** Only if a threshold quantity is exceeded for either manufacturing, processing, or otherwise use, would a facility be required to submit a TRI report. For each of those chemicals, information on how and what quantities are managed as waste are reported on the TRI form. So again, threshold quantities are not reported under TRI. But, they are necessarily calculated to determine whether or not a Form R or Form A report must be completed and submitted.

Slide 44
Section 313 Chemicals (Non-PBT) and Thresholds
Duration: 00:00:32



Notes:
We have described the threshold activities. Now, what are the actual threshold quantities that would trigger TRI reporting? For chemicals that are not considered PBT's, or for non-PBT chemicals, the thresholds for manufacturing are 25,000 pounds; for processing, 25,000 pounds; and for otherwise use, 10,000 pounds. These are the threshold quantities for the majority of the TRI chemicals.

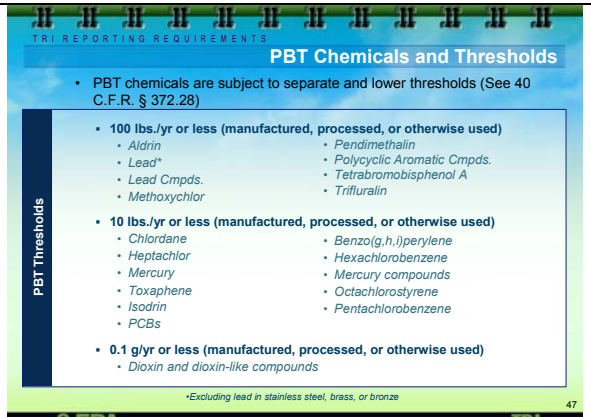
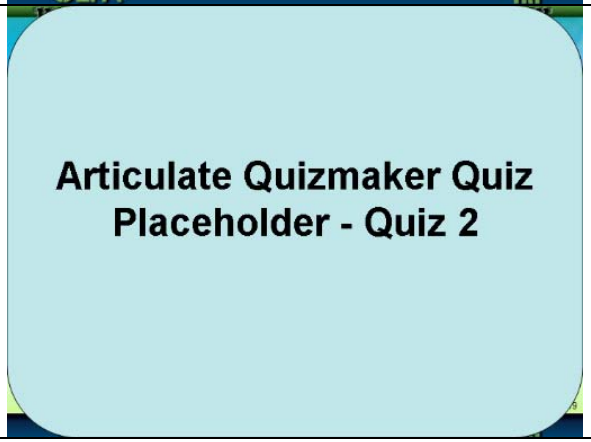
Slide 45
Listed PBT TRI Chemicals
Duration: 00:00:26

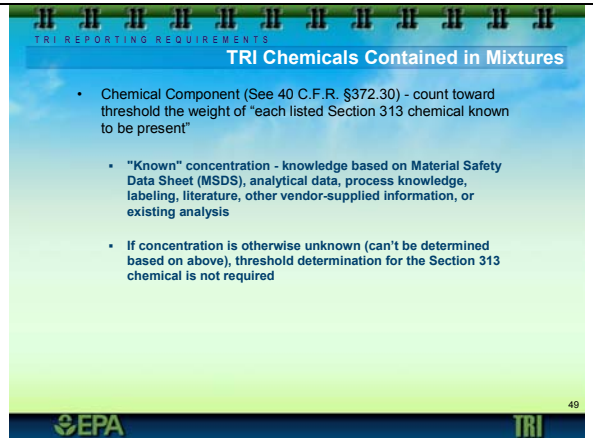
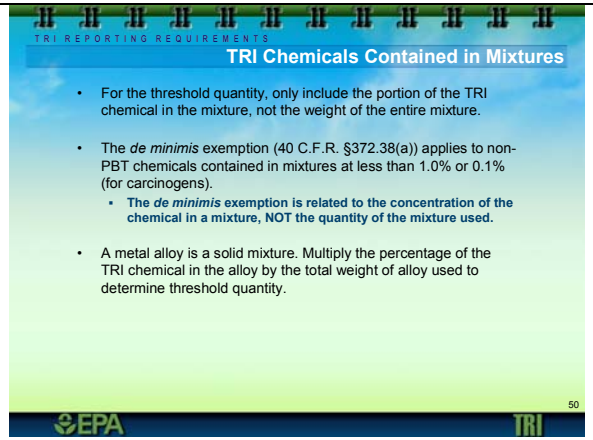


Notes:
Persistent bioaccumulative toxic chemicals, or PBTs, are a subset of the chemicals on the TRI chemical list. PBT chemicals have lower thresholds than other TRI chemicals and they also have some special rules when reporting them to TRI. Currently there are 20 chemicals and chemical categories that are designated as PBT's under TRI.

Slide 46
PBT Chemicals
Duration: 00:00:09

Notes:
These PBT chemicals include aromatic compounds, metals and metal compounds, and pesticides. They are all listed here.

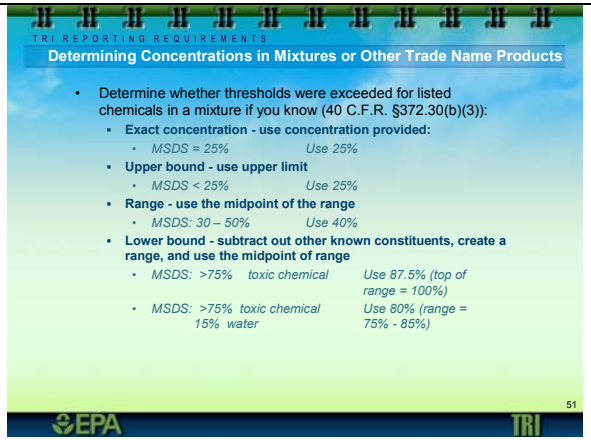
Slide 47 **PBT Chemicals and Thresholds** Duration: 00:00:39		**Notes:** The actual threshold quantities that trigger reporting vary depending on the chemical. For eight of the chemicals, the threshold is 100 pounds per year. For those chemicals that are considered to be highly persistent and bioaccumulative, the threshold is 10 pounds per year. And for dioxin and dioxin-like compounds, the threshold is .1 grams per year, which reflects the highly toxic nature of this chemical category. For PBT chemicals, the threshold quantities are the same for manufacturing, processing, and otherwise use.
Slide 48 **Quiz 2** Duration: 00:02:00 Advance mode: By user		

Slide 49 **TRI Chemicals Contained in Mixtures** Duration: 00:00:58		**Notes:** TRI chemicals are often one of a number of chemical components contained in a mixture. Only the actual amount of the TRI chemical in the mixture is counted towards the activity threshold. To calculate the threshold quantity the concentration of the chemical in the mixture is needed. In some cases the actual concentration of the TRI chemical in the mixture is known. In other cases the chemical concentration is not known. Chemical concentrations can be obtained from Material Safety Data Sheets, analytical data, your own process knowledge, from the labels of the containers, any literature associated with the product. Vendors may supply it. Or you may have additional data. If a TRI chemical is not known to be present in a mixture, then a threshold determination for the TRI chemical is not required.
Slide 50 **TRI Chemicals Contained in Mixtures** Duration: 00:00:53		**Notes:** When determining threshold quantities, be sure to only include the portion of the mixture that is the TRI chemical, and not the weight of the entire mixture. The de minimis exemption, which we will discuss in detail, applies only to non-PBT chemicals that are in mixtures and in concentration that is less than 1% or .1% for carcinogens. The de minimis exemption allows for low concentrations of TRI chemicals in mixtures to be ignored in most cases. It is not related to the quantity of the mixture used. Note that metal alloys are considered solid mixtures. Like any other mixture, you would multiply the percent of the TRI chemical that is in the alloy by the total weight of the alloy to determine the threshold quantity.

Slide 51

Determining Concentrations in Mixtures or Other Trade Name Products

Duration: 00:02:10



Notes:

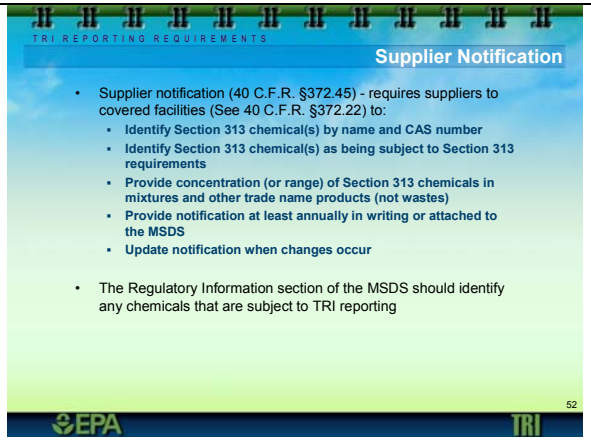
Concentration of a TRI chemical can often be obtained from the Material Safety Data Sheet or other product information. In some cases the exact concentration of the TRI chemical is provided. For example, in the case – if a Material Safety Data Sheet provides a concentration of 25% for a TRI chemical, facilities would use 25% for their activity threshold determinations and any subsequent reporting.

In other cases, the MSDS may provide only an upper bound for the TRI chemical. For example, if the MSDS says there is at most 25% of the TRI chemical, in those cases facilities would actually use 25%, the upper limit, in their calculations. Oftentimes an MSDS will provide a range for a TRI chemical. For example, if the MSDS says 30 to 50%, facilities would use the midpoint of the range – in this case, 40%.

In some cases a lower bound is provided for a TRI chemical in a mixture. If a lower-bound is provided, facilities would subtract out any other known constituents, creating an upper bound, thereby creating their own range, and use the midpoint of the range. For example, if an MSDS says there are at least 75% of the TRI chemical. In that case, we know that there is anywhere between 75% and 100% of the TRI chemical. The midpoint of that range would be 87.5%.

In some cases, the MSDS may say there is at least 75% of the toxic chemical and there is also, for example, 15% water. In this case, we know that the upper bound is 85%. The midpoint of the range of 75 to 85% would be 80%.

Slide 52
Supplier Notification
Duration: 00:00:60

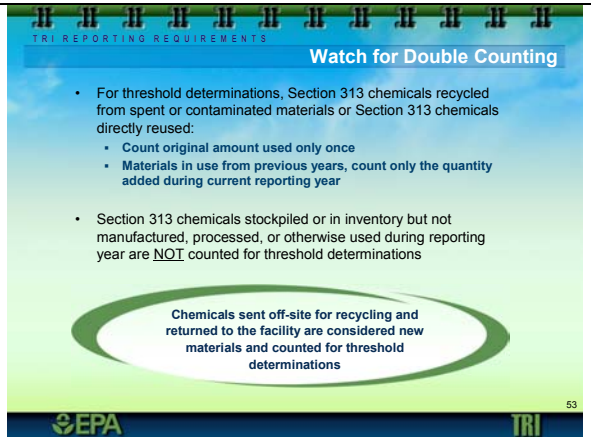


Notes:

Under TRI, facilities that supply TRI chemicals to others must provide information about those TRI chemicals. For example, they must identify the TRI chemical by name and by CAS number and must identify that this chemical is subject to Section 313 or TRI reporting requirements. They must provide a concentration or a range of concentrations for the TRI chemical that is in a mixture or a trade name product.

They must provide this notification at least annually or attach it to the Material Safety Data Sheet for the chemical. If any changes occur related to the TRI chemical or its concentration, they must provide that information as well. Usually, MSDS's contain a Regulatory Information section which should identify the TRI chemicals present and their concentrations.

Slide 53
Watch for Double Counting
Duration: 00:00:47



Notes:

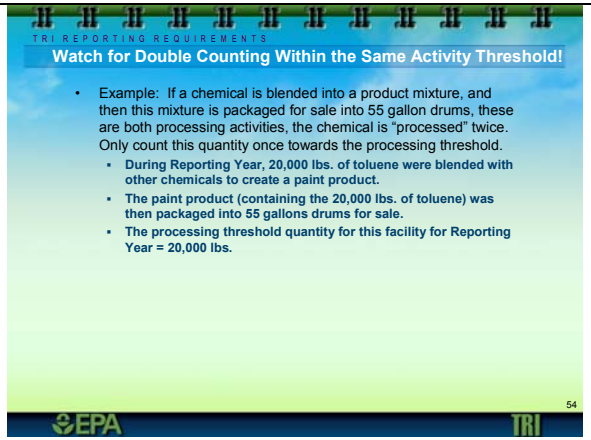
Be sure to watch out for double counting when calculating threshold quantities. Count the original amount of the chemical used in a threshold activity over the course of the reporting year only once. For materials that are in use from previous years, only count the quantity that was added during the current reporting year. Remember that chemicals that are stored or stockpiled that are not manufactured, processed, or otherwise used during the reporting year are not counted for threshold determinations.

Also note that any chemicals that are sent off-site for recycling and returned to the facility are considered new materials and would be counted again towards activity thresholds.

Slide 54

Watch for Double Counting Within the Same Activity Threshold!

Duration: 00:00:51



Notes:

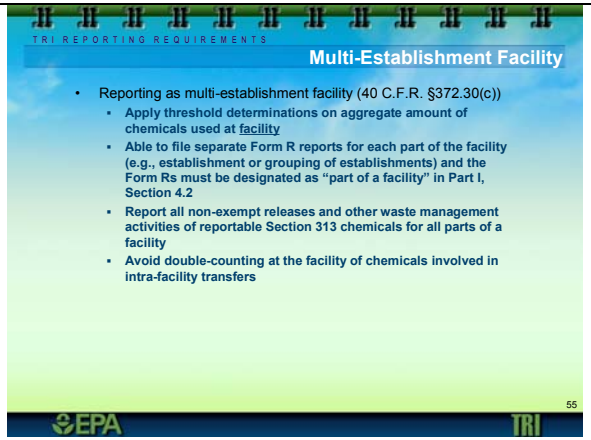
Be sure to watch out for double accounting within the same activity threshold. For example, if a facility blends a TRI chemical in a product mixture and then the mixture is repackaged for sale into another container, those are both considered processing activities – the blending and the repackaging. While a chemical is processed twice, only count the quantity once towards the processing threshold.

For example, let's look at a facility where 20,000 pounds of toluene were blended with other chemicals to create a paint product. The paint product was then repackaged into 55 gallon drums for sale. The processing threshold for this facility for that reporting year is only 20,000 pounds.

Slide 55

Multi-Establishment Facility

Duration: 00:01:36

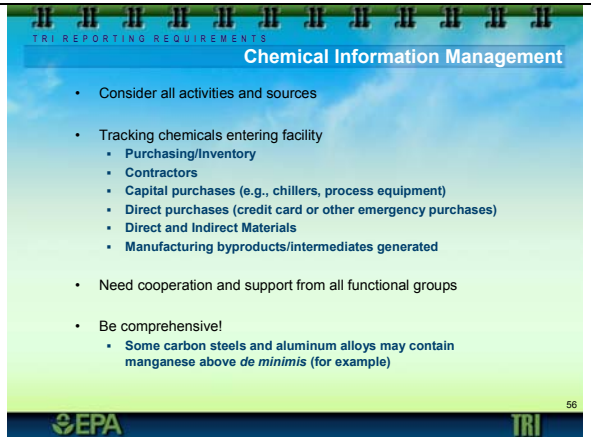


Notes:

Facilities that are comprised of multiple establishments must take care to avoid both double counting and under counting of TRI chemicals used across the facility. Multi-establishment facilities are facilities that are comprised of separate economic or organizational units within the facility. Sometimes these separate units can create barriers to information exchange and gaps or overlaps in TRI reporting responsibilities. For threshold determinations facilities must consider the aggregate amount of TRI chemicals used throughout the facility, including all of the establishments. If a threshold is exceeded a TRI form is required. Multiple establishment facilities can file separate Form R reports for each part of the facility.

On the TRI Form R and in the reporting software, the filer can designate their submittal for a part of the facility. Remember to report all non-exempt releases and other waste management activities of reportable TRI chemicals for all parts of a facility. When reporting as multiple establishments, avoid double-counting of the same chemicals. When facilities do report as separate establishments within the same facility, the quantities on the reports will be added together by EPA, and the reports that are made available to the public will show the aggregate amounts.

Slide 56
Chemical Information Management
Duration: 00:01:07

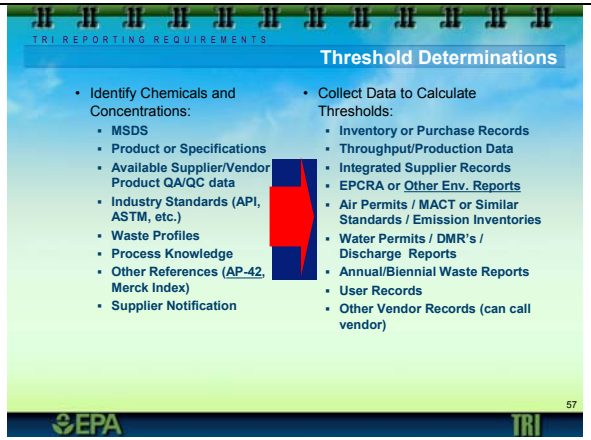


Notes:

To ensure accurate TRI threshold determination, be sure to consider all activities and sources of the TRI chemicals at the facility. It might help to track chemicals as they enter the facility. Consider chemicals that are purchased or that are in inventory. Consider chemicals used by contractors, because you're responsible for your contractors' use of TRI chemicals as well. Don't forget capital purchases and one time purchases. And don't forget materials that may be manufactured as byproducts or intermediates. These should all be considered towards activity thresholds.

It helps to get the cooperation and support from all the different groups at the facility who may be purchasing or using TRI chemicals. Be comprehensive. For example, consider TRI chemicals that may be in steel or aluminum alloys that may be above the de minimis concentration. Manganese is one example.

Slide 57
Threshold Determinations
Duration: 00:00:59



Notes:

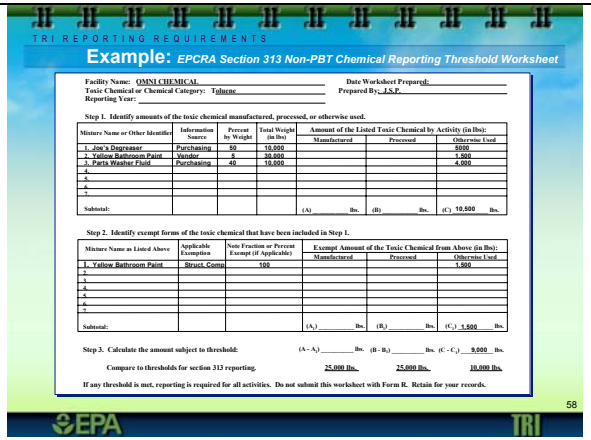
There are a number of different sources of information available to facilities – to both identify the chemicals and concentrations, collect the data, and calculate the thresholds. We have talked about some of these already – such as MSDS's and product specifications. Facilities should also consider any waste profiles or testing data. Also, consider using any other data about the wastes leaving and raw materials entering your facility. Inventory or purchase records are often a good source of information. Production data can help you in quantifying the amounts of TRI chemicals to apply towards thresholds.

Regulatory reports, either air permits or water, chemical analyses associated with permits applications, and waste reports – are all potential sources of information on TRI chemicals.

Slide 58

Example: EPCRA Section 313 Non-PBT Chemical Reporting Threshold Worksheet

Duration: 00:01:57



Notes:

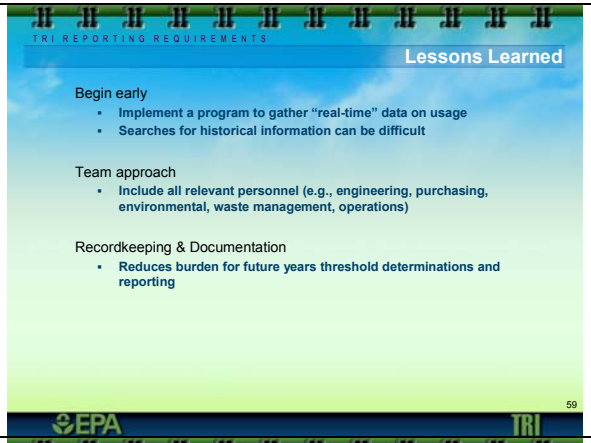
Here we show a threshold worksheet, which can help you to quantify the amounts of TRI chemicals to apply towards your activity thresholds and to determine whether or not you've exceeded an activity threshold. In this example Omni Chemical has filled out a worksheet for toluene.

In the first step they've identified all the mixtures or products that contain toluene at their facility. A degreaser, some paints, and a wash parts washer fluid. They've recorded where this information was obtained, the percent of the TRI chemical by weight, and a total weight of the mixture. In each case they've multiplied the percent of the TRI chemical by the total weight to obtain the quantity of the TRI chemical that was either manufactured, processed, or otherwise used.

In this case, the toluene was all 'otherwise used.' The total quantity otherwise used is 10,500 pounds. The next step is to identify TRI chemicals that may fall under some of the exemptions that we will discuss later. In this case, the bathroom paint, the paint that's used in the bathrooms, is exempt under the structural components exemption.

None of the toluene in the bathroom paint would need to be considered towards the otherwise use activity threshold. So the facility is able to subtract the 1,500 pounds in the paint from their total to obtain 9,000 pounds of toluene that was otherwise used at the facility in the reporting year. Because the threshold for the otherwise use of toluene is 10,000 pounds, they have not exceeded the threshold and would not need to complete a TRI report for toluene.

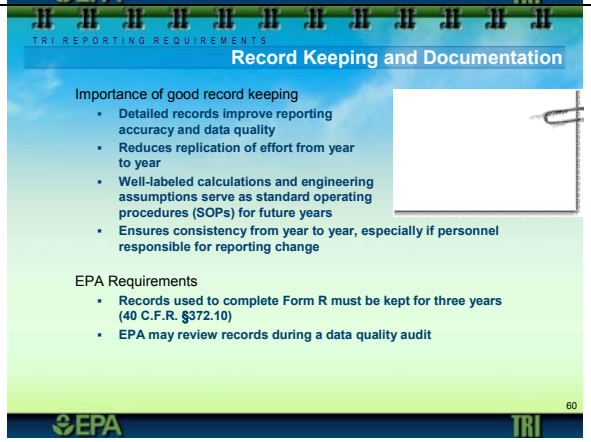
Slide 59
Lessons Learned
Duration: 00:00:43



Notes:

In threshold determinations and TRI reporting, it helps to begin the process early. Facilities should put systems into place that gather the information in real time. Researching information on TRI chemicals, oftentimes more than a year after they were used at your facility, can be difficult. Use the team approach. Spread the work by involving the people that are using or managing these TRI chemicals – engineers, people in purchasing, in the health and safety department are some examples. Be sure to keep good records, and to document your work. This will reduce the burden for future years.

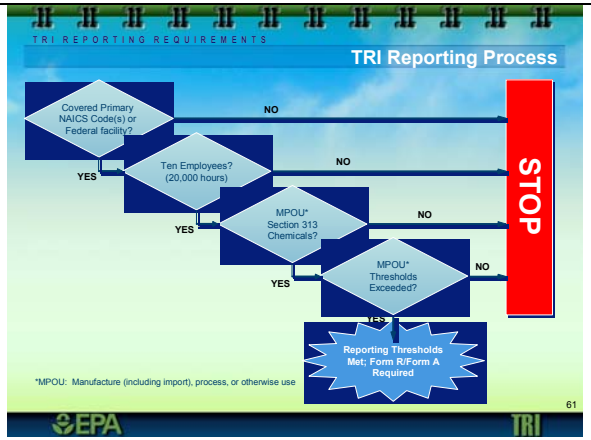
Slide 60
Record Keeping and Documentation
Duration: 00:00:50



Notes:

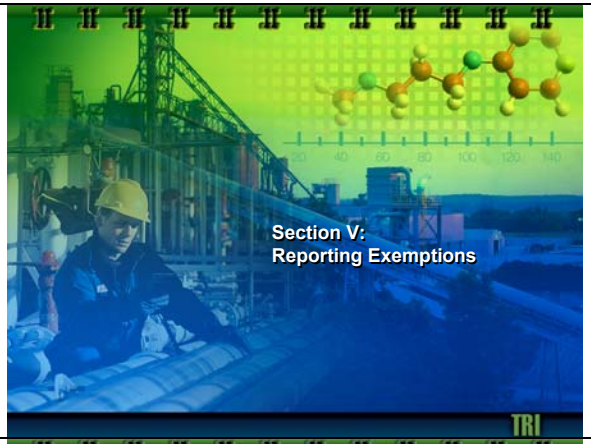
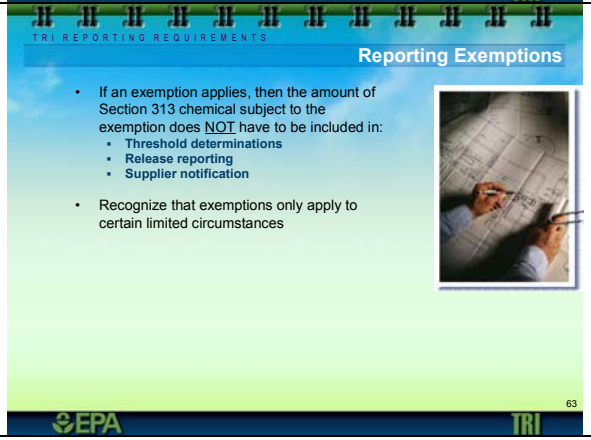
It's very important to keep good records. Keeping detailed records improves the reporting accuracy and the quality of the data. Also it will reduce replication of effort from year to year. Facilities should also keep good records of calculations, information sources, and assumptions, so that they can form the basis of procedures for completing their threshold determinations and reports in future years. Such practices help insure consistency from year to year especially when the personnel responsible for TRI requirements changes. Also, record keeping is required by EPA. Facilities must keep their records for three years. And the EPA can review those records if an audit is conducted at the facility.

Slide 61
TRI Reporting Process
Duration: 00:01:22

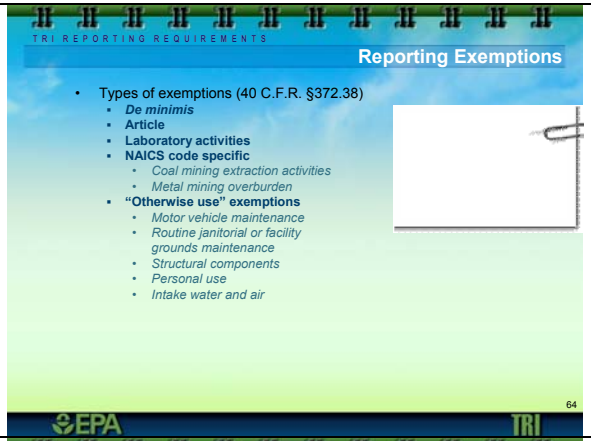


Notes:

Before we continue with the TRI reporting process, let's summarize the steps for determining whether TRI reporting is required. To determine whether or not a facility needs to report to TRI, the first step is to determine whether or not the facility's primary NAICS code is one of the covered NAICS codes or if it is a Federal facility. If not, the facility is not covered by TRI and would not need to continue. If so, the next step is to determine whether or not it has 10 or more full time employees. If not, the facility is not covered by TRI.

Slide 61 - Continued **TRI Reporting Process** Duration: 00:01:22		**Notes:** The next step is to determine whether or not the facility manufactures, processes, or otherwise uses TRI chemicals. If not, it would not need to report to TRI, but if so, the next step is to determine whether or not the facility has exceeded the threshold for manufacturing, processing, or otherwise using those TRI chemicals. If it has not exceeded any thresholds, no reports are required. If so, the facility would need to complete and submit a Form R or a Form A for each of the chemicals for which an activity threshold was exceeded.
Slide 62 **Section V: Reporting Exemptions** Duration: 00:00:05		**Notes:**
Slide 63 **Reporting Exemptions** Duration: 00:00:32		**Notes:** Next we will be covering a number of exemptions to TRI reporting. The purpose of reporting exemptions is to reduce the burden of reporting associated with small or ancillary operations. If an exemption applies, then all the associated amount of the TRI chemical does not need to be included in threshold determinations, release reporting, or supplier notification. It's important to note that exemptions only apply in certain limited circumstances.

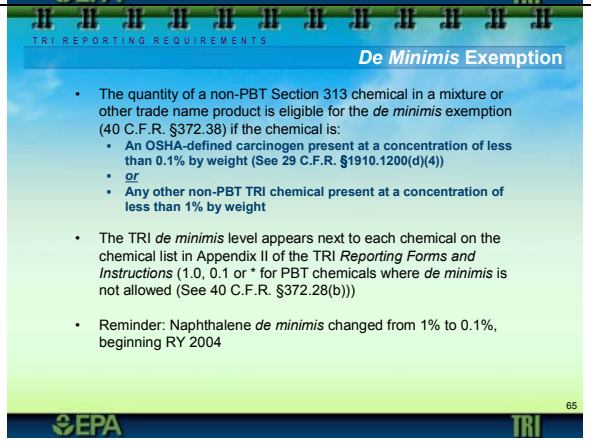
Slide 64
Reporting Exemptions
Duration: 00:00:30



Notes:

The TRI exemptions include the de minimis exemption, the articles exemption, the laboratory activities exemption, and two exemptions that are specific to facilities in the coal mining and metal mining sectors. Also, there is a series of exemptions for the otherwise use of TRI chemicals in motor vehicle maintenance, routine janitorial or facility grounds maintenance, structural components, personal use, and intake water and air.

Slide 65
De Minimis Exemption
Duration: 00:01:04



Notes:

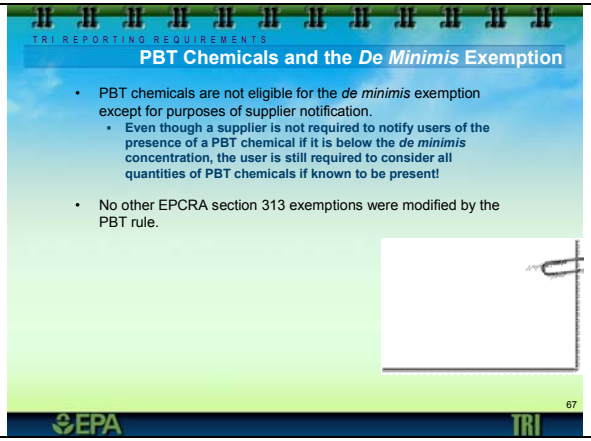
Let's look at the de minimis exemption first. Under the de minimis exemption, the quantity of a non-PBT TRI chemical in a mixture or other trade name product is exempt from TRI if – in the case of an OSHA-defined carcinogen, the TRI chemical is present at a concentration less than 0.1% by weight. Or, in the case of a non-OSHA-defined carcinogen, at a concentration of less than 1% by weight. The de minimis concentrations are provided for each chemical on the TRI chemical list, which is Table II of the reporting forms and instructions. It is also available from the TRI assistance library and the TRI-ME reporting software. Recently, in the 2004 reporting year, the de minimis concentration for napthalene changed from 1% to 0.1% as that chemical became an OSHA-defined carcinogen.

Slide 66
De Minimis Exemption
Duration: 00:01:10

Notes:

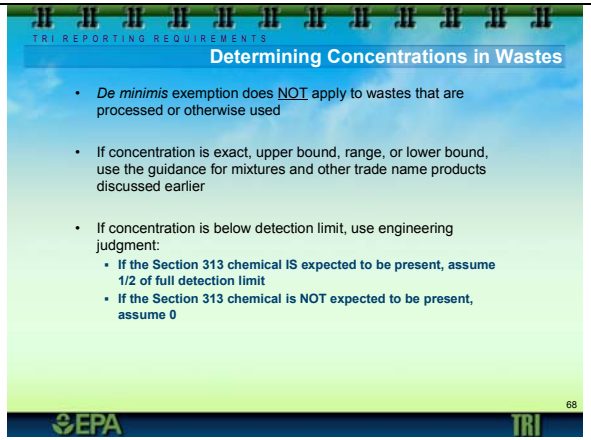
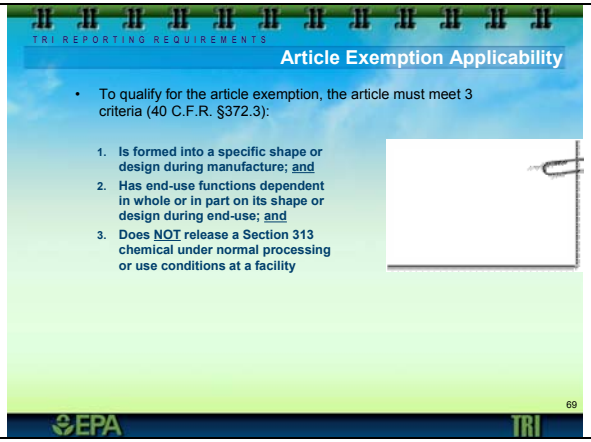
So how does the de minimis exemption work? De minimis exemption can apply to non-PBT chemicals that are in mixtures of trade name products that are processed or otherwise used. It can also apply to two manufacturing activities: coincidentally manufacturing when the TRI chemical remains as an impurity in the product; and importing the mixture containing the TRI chemical. In other words, the de minimis exemption does not apply to manufacturing of chemicals in most cases, including coincidentally manufacturing of TRI chemicals as by-products, which are removed from the process. The de minimis exemption also does not apply to wastes that are received from off-site. And it does not apply to PBT chemicals. PBTs, or persistent, bioaccumulative toxics, are a subset of the TRI chemicals comprised of 21 chemicals and chemical categories. PBT chemicals are discussed in detail in the Advanced Concepts Module.

Slide 67
PBT Chemicals and the De Minimis Exemption
Duration: 00:00:40

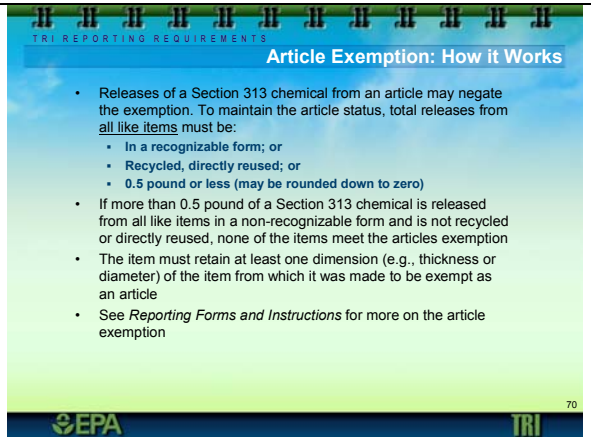


Notes:

The de minimis exemption cannot be used for PBT chemicals. As for the supplier notification requirements, suppliers are not required to notify users of the presence of a TRI chemical that is below the de minimis concentration. However, the users of the mixtures containing TRI chemicals are still required to consider all quantities of TRI chemicals know to be present. The de minimis exemption is the only exemption that does not apply to PBT chemicals. All of the other exemptions apply to both PBT and non-PBT chemicals.

Slide 68 **Determining Concentrations in Wastes** Duration: 00:00:53		**Notes:** The de minimis exemption does not apply to wastes that are processed or otherwise used. Facilities don't always know whether or not the TRI chemical is present in a mixture at a concentration that is above its de minimis. For example, in cases where the MSDS gives a range or an upper bound, use the guidance we discussed earlier for how to determine what concentration to use and compare that to the de minimis. In the situation where you know the TRI chemical is present but it's below the detection limit, use your engineering judgment. If the chemical is expected to be there, assume that it's at a level of half the full detection limit. If you don't expect the TRI chemical to be present, you can assume that its concentration is zero.
Slide 69 **Article Exemption Applicability** Duration: 00:00:38		**Notes:** Next, let's look at the articles exemption. The article exemption applies to TRI chemicals contained in articles. There are three criteria that must be met to be considered an article under TRI. First, an article is formed into a specific shape or design during its manufacture. Second, an article has an end-use function that is dependent in whole or in part on that shape or design. And, third, an article does not release a TRI chemical under normal processing or use conditions at the facility.

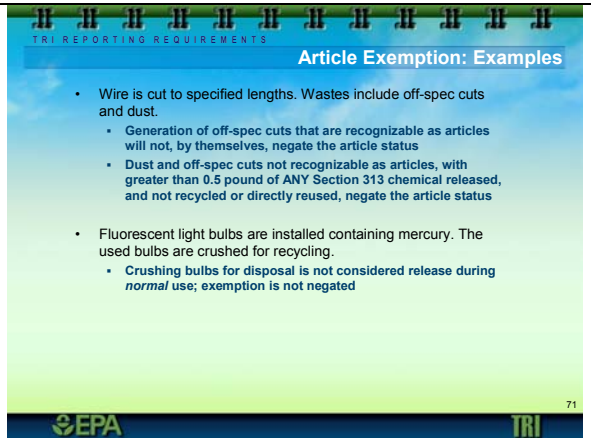
Slide 70
Article Exemption: How it Works
Duration: 00:01:14



Notes:

Now lets look at how the article exemption works in more detail. If a TRI chemical is released from an article during its normal use, it very well may negate the article's exemption. In order to maintain the article's status, the total TRI chemicals released from all like articles or like items must be either: 1) in a recognizable form, or 2) recycled directly or directly reused, or 3) must be less than half a pound. In a recognizable form means that the releases from the article must still look like and be recognized as pieces of the article. If more than half a pound of TRI chemical is released from all the like items used at the facility in the course of the year, and the releases are not in a recognizable form, and they are not recycled or directly reused, none of the items meet the article exemption. Also, to maintain a recognizable form, the article must maintain its thickness or diameter to be considered exempt as an article.

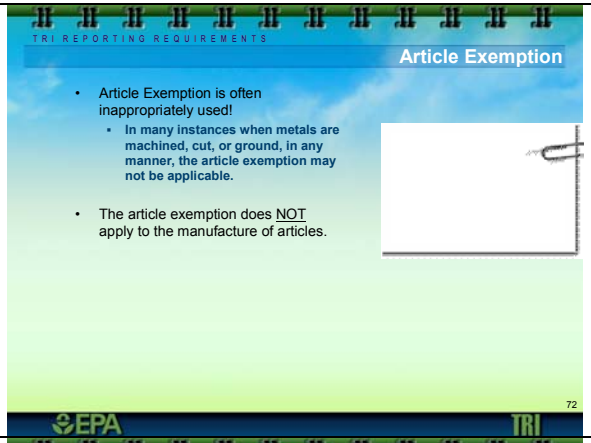
Slide 71
Article Exemption: Examples
Duration: 00:01:27



Notes:

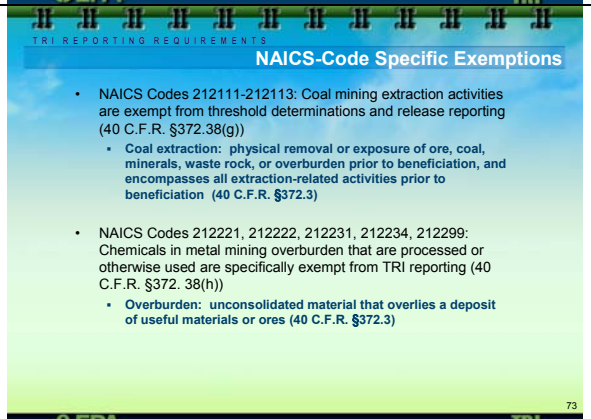
Now let's look at an example where wire is cut into specified lengths. Wire itself would be considered an article, but in cutting the wire to the specified lengths, there is some waste of off-spec cuts and some dust. The generation of the off-spec cuts that are still recognizable as pieces of wire will not by themselves negate the article's status.
Quantities of the dust and off-spec cuts that are not recognizable as pieces of wire and that are greater than half a pound for any TRI chemical and not recycled or directly reused would negate the article status. Let's look at the example of fluorescent light bulbs which contain mercury, a TRI chemical. When the bulbs are no longer of use, they are crushed in an enclosed container for recycling. In this case the fluorescent bulbs would still be exempt. The normal use of the fluorescent bulbs does not release mercury. Crushing of the bulbs may release mercury, but that is not considered normal use of the bulb, so the exemption is not negated. Note that the mercury in the bulbs is exempt from TRI reporting, but other regulatory requirements associated with the proper management of waste fluorescent bulbs should be followed.

Slide 72
Article Exemption
Duration: 00:00:38



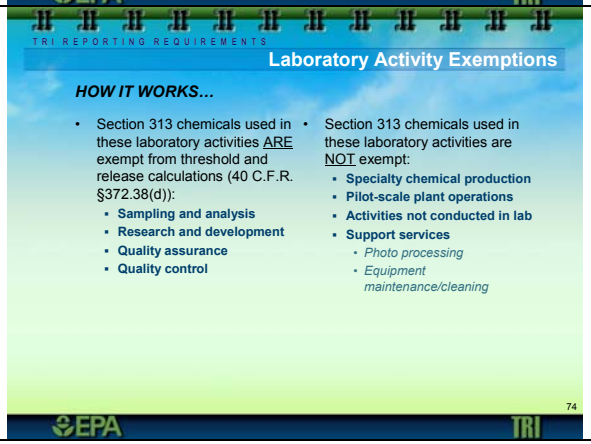
Notes:
Facilities need to be careful that they do not inappropriately use the articles exemption. Because it only takes ½ pound of TRI chemical released or disposed of over the course of a year to negate the articles status, often when metals containing TRI chemicals are machined, cut, or ground, in any manner, the article exemption would not apply. Also the article exemption does not apply to the actual manufacturing of articles. The articles need to be brought in from a supplier and processed or otherwise used at the facility.

Slide 73
NAICS-Code Specific Exemptions
Duration: 00:00:31



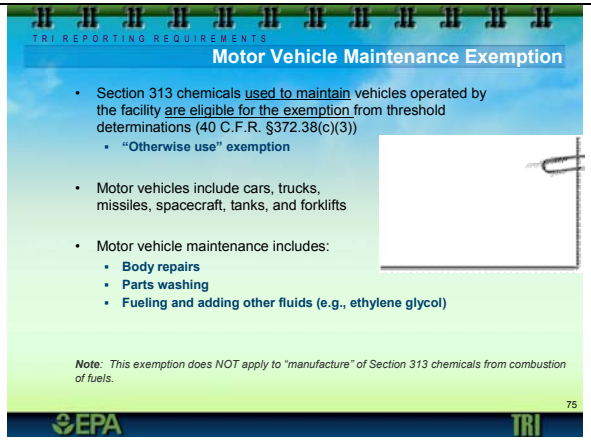
Notes:
There are also a number of industry-specific, or NAICS-code specific exemptions. The first one applies to certain coal mining activities that would be exempt from threshold determinations and release reporting. For coal mining, the exempt activities include the physical removal or exposure of the ore or coal prior to the beneficiation of the material. Similarly, certain metal mining activities are also exempt from TRI reporting.

Slide 74
Laboratory Activity Exemptions
Duration: 00:00:37



Notes:
The next exemption is the laboratory activities exemption. TRI chemicals that are used in laboratories are exempt if they are used for sampling and analysis, research and development, quality assurance, or quality control. TRI chemicals used in laboratory activities are not exempt in the case of specialty chemical production, pilot-scale plant operation, activities that are not conducted in an actual lab, and support services such as photo processing or equipment maintenance and cleaning.

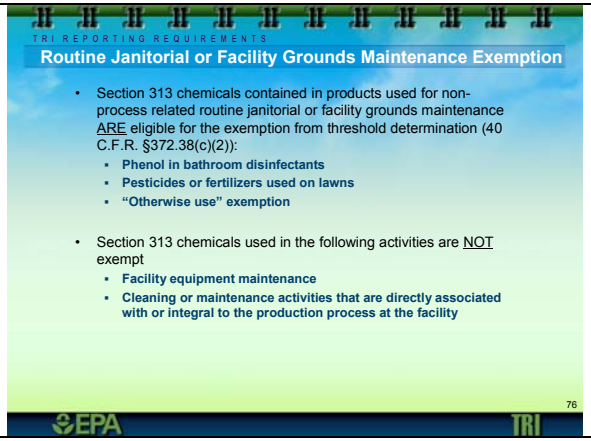
Slide 75
Motor Vehicle Maintenance Exemption
Duration: 00:01:05



Notes:

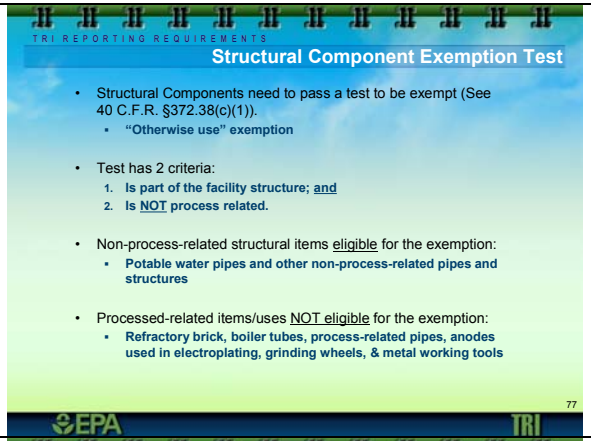
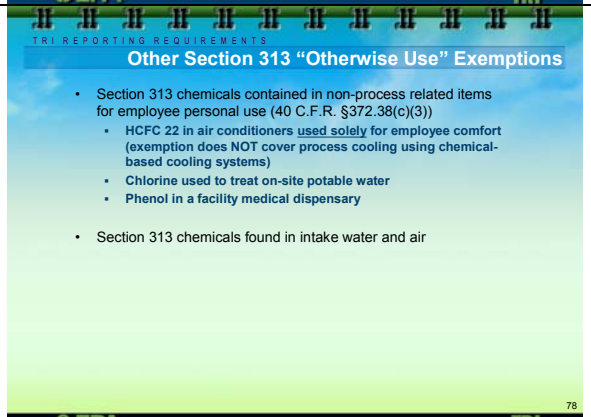
Next, let's look at the motor vehicles maintenance exemption. This is one of the 'otherwise use' exemptions. The TRI chemicals that are otherwise used to maintain vehicles that are operated by the facility would be eligible for this exemption. By motor vehicles, we are including cars, trucks, airplanes, space craft, military vehicles, and forklifts. Motor vehicle maintenance includes body repairs, painting, parts washing and plating, fueling, and adding other fluids to the vehicle. Note that this is an 'otherwise use' exemption, so it does not apply to the manufacture of TRI chemicals from the combustion of fuel in vehicles.
Also, if vehicles are a product of the facility and TRI chemicals are being added to that product, either as a fuel or in some other way, that would be considered processing and not 'otherwise use'. So those chemicals would not be exempt.

Slide 76
Routine Janitorial or Facility Grounds Maintenance Exemption
Duration: 00:00:39



Notes:

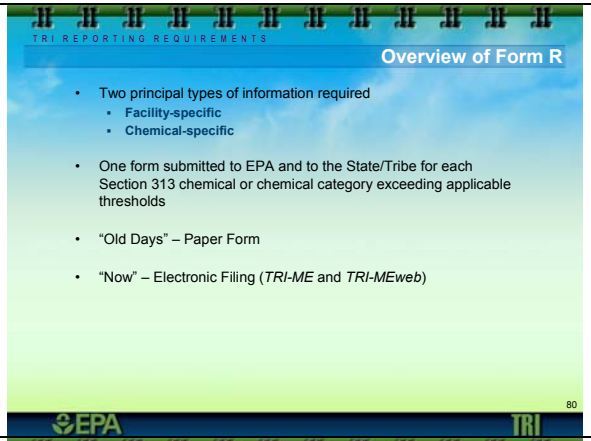
The routine janitorial or facility grounds maintenance exemption covers the otherwise use of TRI chemicals and products and materials used for cleaning facilities and maintaining their grounds. Examples include: pesticides, fertilizers, chemicals that are in cleaners that are used in non-process areas. TRI chemicals that are used for facility equipment maintenance or cleaning or maintenance activities that are directly associated with the production process would not be eligible for the routine janitorial or facility grounds maintenance exemption.

Slide 77 **Structural Component Exemption Test** Duration: 00:00:45		**Notes:** TRI chemicals otherwise used in certain structural components of the facility may also be exempt. First, such chemicals must meet the following requirements: the structural component cannot be part of the facility structure and it cannot be process related. So non-process-related structural items might include water pipes for potable water and any other non-process-related pipes and structures. Typical items that would not be eligible for the exemption – refractory brick, boiler tubes, process-related pipes, anodes used in electroplating, grinding wheels, metal working tools, and things of that nature.
Slide 78 **Other Section 313 "Otherwise Use" Exemptions** Duration: 00:00:43		**Notes:** The remaining otherwise use exemptions apply to personal use of TRI chemicals and TRI chemicals found in intake water and air. With the personal use exemption, chemicals that are used for employee personal use such as refrigerants or air conditioners that are solely for employee comfort, disinfectants used in potable water such as chlorine or phenols used in the medical dispensary are exempt. Also TRI chemicals that are found in intake water and air used at a facility, as long as the facility is not responsible for them being in the intake water and air are also exempt under TRI.
Slide 79 **Section VI: TRI Form R** Duration: 00:00:05		**Notes:**

Slide 80

TRI Form R

Duration: 00:00:46



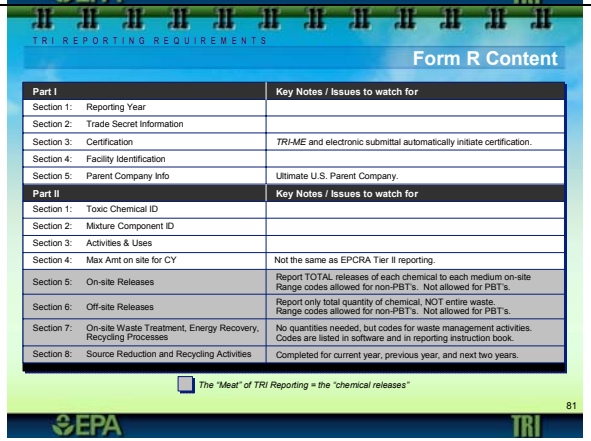
Notes:

In the next part of this module, we'll talk about the TRI Form R. Assuming your facility has exceeded an activity threshold for a TRI chemical, it may be required to complete a TRI Form R. For each TRI chemical for which an activity threshold is exceeded, a form would be required to be submitted to the EPA and to the designated state or tribal authority. In past years, paper forms were used for this reporting. Currently, most TRI forms are submitted electronically. And most are submitted using the TRI-ME or TRI-MEweb software. Relatively few facilities still fill out the paper form.

Slide 81

Form R Content

Duration: 00:01:12



Notes:

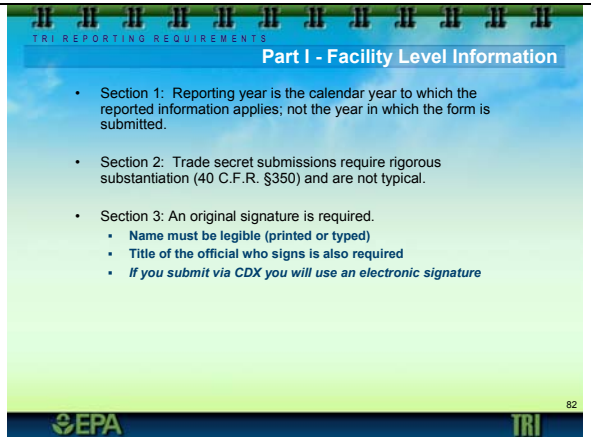
Let's look a little closer at the TRI Form R. The TRI Form R is comprised of two main parts. The first part contains facility-specific information about your facility. There are five sections for reporting information about your facility. The second part covers information about the chemical for which your facility is reporting. There are eight sections in part two. The first four sections identify the chemical, how it is used at the facility, and the maximum amount on site. The next four sections, are what we call the meat of the TRI reporting, and this is where facilities report the actual quantities of the TRI chemicals that were managed as waste.

We will now look at each of these sections in more detail. Note that much more detail and instructions for completing each section of the TRI Form R can be found in the "Reporting Forms and Instructions" document available from the TRI program website and through the TRI assistance library.

Slide 82

Part I - Facility Level Information

Duration: 00:01:41



Notes:

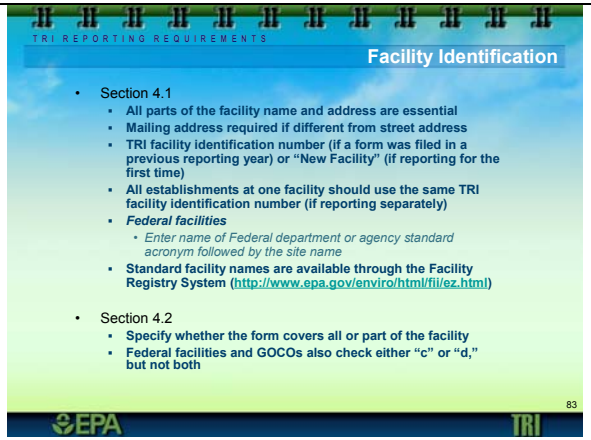
Part one of the TRI From R is comprised of five sections covering information about the facility.

In section one, facilities report the calendar year that the TRI form covers. Note that this is not the year in which the form is submitted.

In section two, facilities indicate whether or not they are claiming trade secret information in this report. In some cases, facilities may feel that reporting on the TRI chemicals that they use and manage as waste could put them at a competitive disadvantage. If facilities can substantiate this claim, there is a process that allows them to submit two forms to TRI – one that includes the actual chemical name, and one in which the actual TRI chemical name is replaced with a generic descriptor. Only the information in the second form is made available to the public. Before claiming a trade secret, facilities must first obtain approval from the TRI program. More information on the approval process can be obtained from the “Reporting Forms and Instructions”.

Section three is where the form is signed for certification. Signers are certifying that the information contained on the form is correct to the best of their knowledge. As described earlier, when submitting electronically using the TRI-ME desktop and TRI-ME web applications, the certification is completed and signed electronically via EPA’s Central Data Exchange.

Slide 83
Facility Identification
Duration: 00:01:29

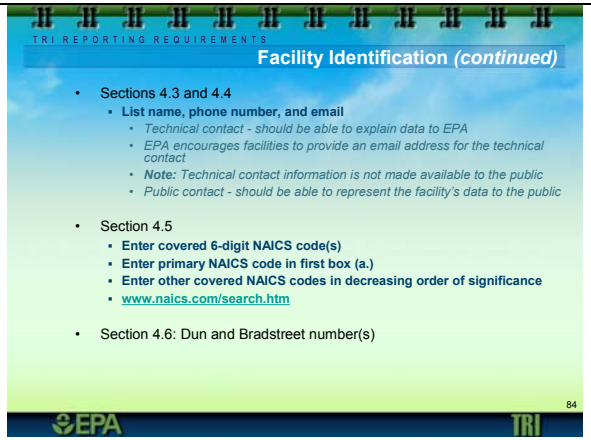


Notes:

Section four of Part one of the Form R contains facility name and location information. Section 4.1 includes name, address, TRI Identification number. If your facility has submitted a form at any time in the past, it will have a TRI ID. TRI IDs stay with a facility even if the facility ownership changes. Facilities that have never filed a TRI report in the past, should enter "New Facility" in place of a TRI ID, and a TRI ID will be assigned by EPA. Federal facilities' names should include the federal department or agency followed by the site name. If you are unsure of your facility's name or whether or not it has filed a TRI form in the past, you can go to the website shown here to search EPA's Facility Registry System.

In Section 4.2, facilities specify whether or not the Form covers the entire facility, or if it only covers part of the facility, with the rest of the TRI reporting for the facility being covered in other form submissions. Also, in this section, facilities indicate whether they are a federal facility or a "Government Owned Contractor Operated" facility.

Slide 84
Facility Identification (continued)
Duration: 00:01:07



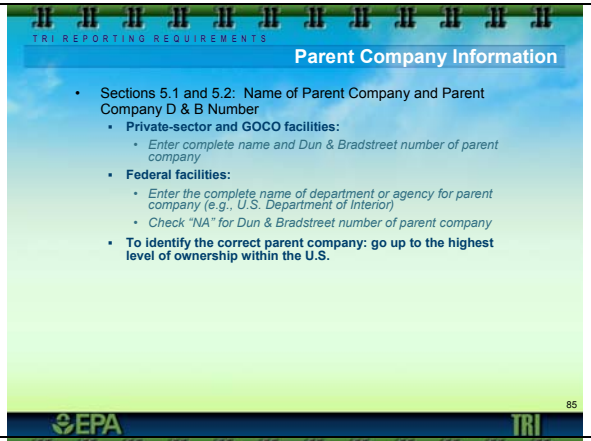
Notes:

Sections 4.3 and 4.4 of Part one cover technical and public contact information, respectively. A technical contact is a person who can answer technical questions from EPA and states about the TRI submittal. This information is not made available to the public. The public contact is a person who can answer inquiries from the public about the TRI data.

In Section 4.5, facilities enter the industry codes that best represent their operations. As previously discussed, in reporting year 2006, the TRI program switched from the SIC code system to NAICS codes. NAICS codes can be found in the website shown here. Remember that the primary NAICS code is the code that represents the largest portion of the facility's operations as defined by "value added".

In Section 4.6, enter the Dun and Bradstreet number for the facility.

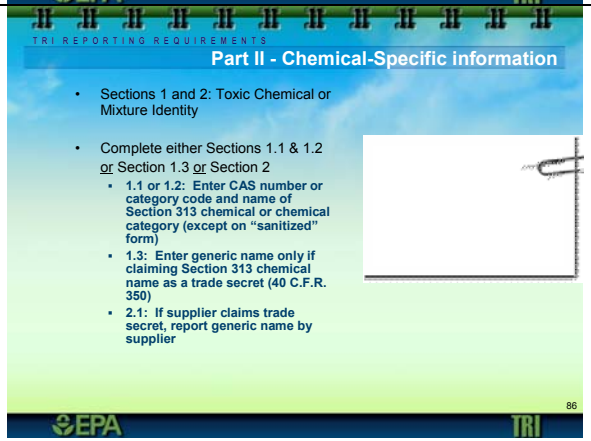
Slide 85
Parent Company Information
Duration: 00:00:23



Notes:

In section five, private sector facilities report information on their parent company, including its name and Dun and Bradstreet number. The parent company is the highest level of ownership within the United States. Federal facilities enter the highest level department or agency and check "NA" for Dun and Bradstreet number.

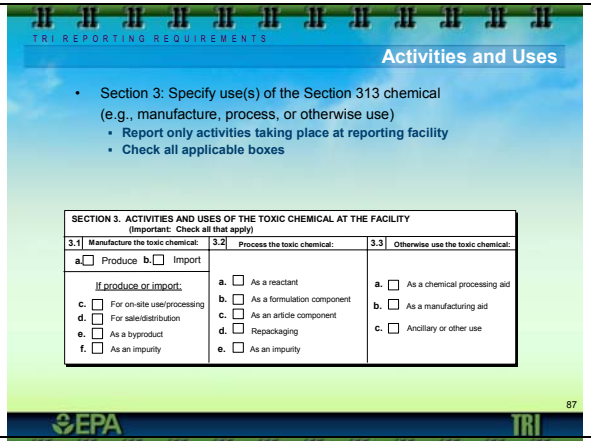
Slide 86
Part II - Chemical-Specific information
Duration: 00:01:01



Notes:

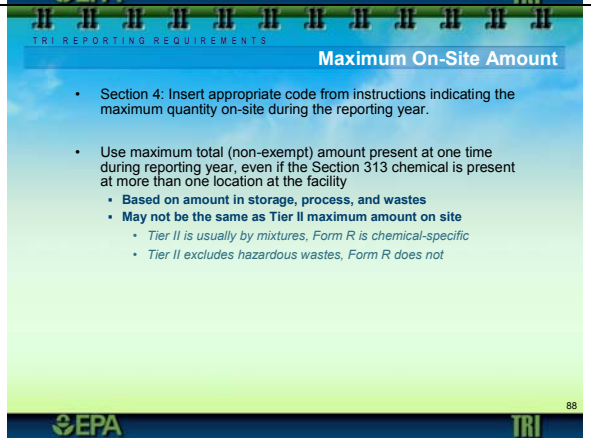
Part two of the Form R is for chemical specific information. In section one, facilities identify the TRI chemicals on which they are reporting. In section 1.1, facilities enter the chemical name and, and section 1.2, the "chemical abstract service" number or the TRI chemical category code. Section 1.3, is only completed by those facilities that are claiming a trade secret. In the public version of the TRI Form R, the facility enters the generic descriptive for the type of chemical in section 1.3. In some cases, the facility's chemical supplier may have claimed a trade secret for a particular TRI chemical and the facility does not know the actual name of the TRI chemical for which they are submitting a report. In this scenario, the facility enters the generic descriptive provided to them in Section 2.

Slide 87
Activities and Uses
Duration: 00:00:10



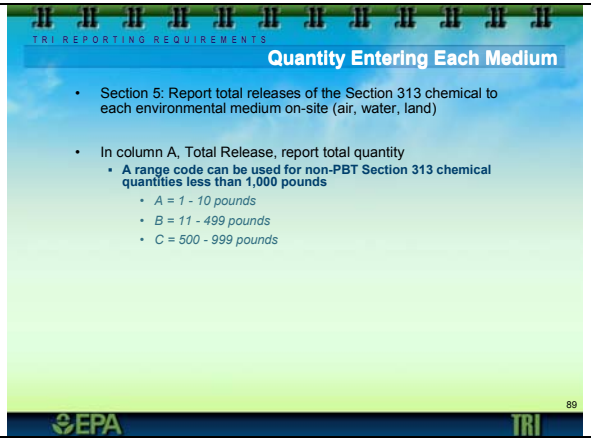
Notes:
In section three, facilities report the activities and uses of the TRI chemical at the facility. Be sure to check all applicable boxes.

Slide 88
Maximum On-Site Amount
Duration: 00:00:49



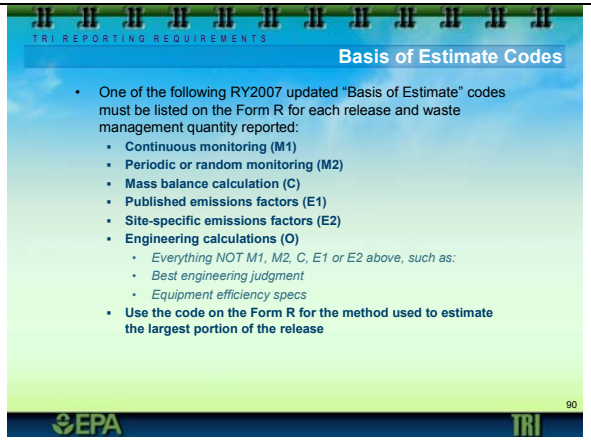
Notes:
In section four, facilities report the maximum quantity of the TRI chemical that was on site at any one time during the reporting year. The quantity is reported by entering a code representing a range of pounds of the chemical. The codes are available from the "Reporting Forms and Instructions" document and from the TRI-ME reporting software. Note that this quantity is comprehensive of all locations and uses of the chemical at the facility including quantities in storage, in the process stream, and in wastes. This is different from Tier two maximum amount on site which includes the weight of the entire mixture and does not include quantities in hazardous wastes.

Slide 89
Quantity Entering Each Medium
Duration: 00:00:39



Notes:
In Section five, which is comprised of a number of subsections, facilities report the quantities of the TRI chemical that are released to each environmental medium on-site. In sections 5 and 6 of the TRI Form R, facilities have the option of reporting one of three "ranges codes" in place of actual quantities of chemicals, if the quantity is less than 1,000 pounds, AND if the chemical is not a PBT chemical. Range codes cannot be used for PBT chemicals, instead the actual quantity must be entered for PBT chemicals.

Slide 90
Basis of Estimate Codes
Duration: 00:01:34

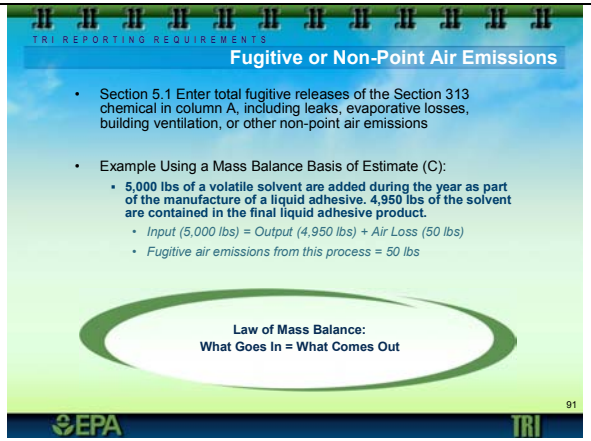


Notes:

For each chemical quantity entered in Sections 5 and 6 of the Form R, facilities much also indicate how the quantity was estimated by entering a "basis of estimate" code. Note that beginning in RY2007, the number of basis of estimates codes has increased to the six shown here. Is the estimate based on data from a continuous monitoring system? If so, enter a Basis of Estimate code of M1. Enter "M2" if the estimate is based upon periodic or random monitoring. Is the estimate based on a mass balance calculation? That would be a Basis of Estimate Code of C. If the quantity is based on a published emission factor, then enter "E1" as the Basis of Estimate code. E2 is for site-specific emissions factors that are non-published, that were perhaps developed through in-house testing, or were provided by the vendor of your process or pollution control equipment. The last code, "O", is for "other" and is used for engineering calculations. O is also any other method that is not covered by the other codes.

In some cases, the quantity entered on the TRI Form could be based on multiple estimation techniques. In these cases, enter the basis of estimate code that represents the largest portion of the estimate.

Slide 91
Fugitive or Non-Point Air Emissions
Duration: 00:01:12

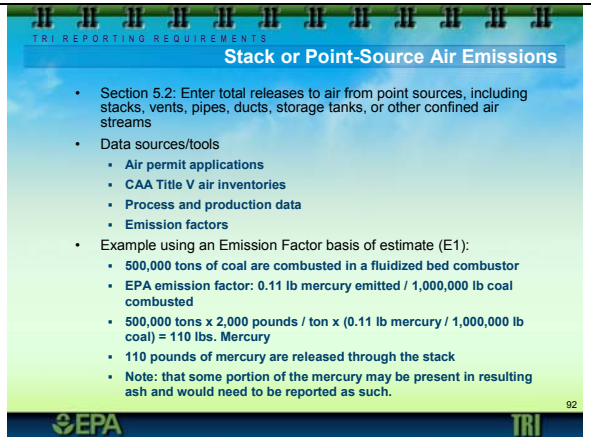


Notes:

Enter the quantity of the TRI chemical that is released to the air from fugitive and non-point sources in Section 5.1 of Part two of the Form R. Fugitive and non-point emissions include leaks, evaporative losses, building ventilation, and any other air emissions that cannot be traced to a discreet point. As with all estimates entered in Sections 5 and 6, enter the basis of estimate code that best represents the estimation technique used.

In the example shown, a facility knows that it used 5,000 pounds of a volatile solvent during the reporting year. They also know that 4,950 pounds of the solvent were contained in the adhesive product that they manufactured. Using a simple mass balance calculation they are able to determine that 50 pounds of the TRI chemical were released to the air through fugitive emissions. The facility then enters 50 pounds in Section 5.1 along with a basis of estimate code of "C".

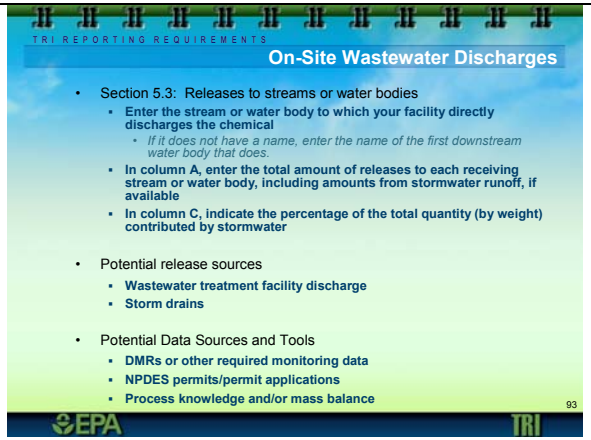
Slide 92
Stack or Point-Source Air Emissions
Duration: 00:01:01



Notes:

In section 5.2, enter the quantity of the TRI chemical that was released to the air via stacks or other point sources such as vents, pipes, ducts, storage tanks, and any other confined stream. In some cases these emissions may already be monitored or estimated for air permits or other regulatory requirements. In other cases they can be estimated from emissions factors and production data. An example of an estimate based on a published emissions factor is shown here. A facility combusting 500,000 tons of coal in a fluidized bed combustor obtained a published emissions factor for mercury in such a system. Using the emission factor, they were able to determine that 110 pounds of mercury was released through the stack, which they entered on the TRI form along with a basis of estimate code of “E1”.

Slide 93
On-Site Wastewater Discharges
Duration: 00:01:16



Notes:

Wastewater discharges are reported in two places on your form R. In Section 5.3 facilities report releases directly discharged to a stream or water body. Often these are regulated and monitored as part of an NPDES permit. Facilities enter the name of the water body if it has a name. If it does not have a name, then report the name of the nearest downstream water body that does have a name.

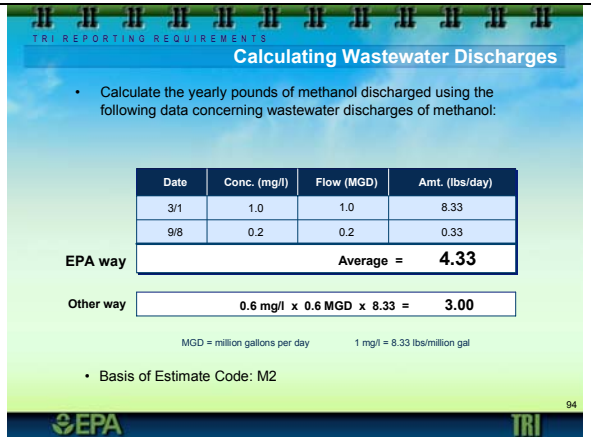
Be aware that the quantity of TRI chemical reported in Column A of section 5.3 should also include any stormwater runoff containing the TRI chemical. In column C, facilities indicate the percent of the total reported in Column A that can be attributed to the stormwater releases.

The other place on the Form R where wastewater discharges are reported cover discharges to a POTW. Because the POTW will conduct further waste management on the discharged chemicals, these discharges are considered offsite transfers, so they are reported Section 6 of Form R.

Slide 94

Calculating Wastewater Discharges

Duration: 00:01:58



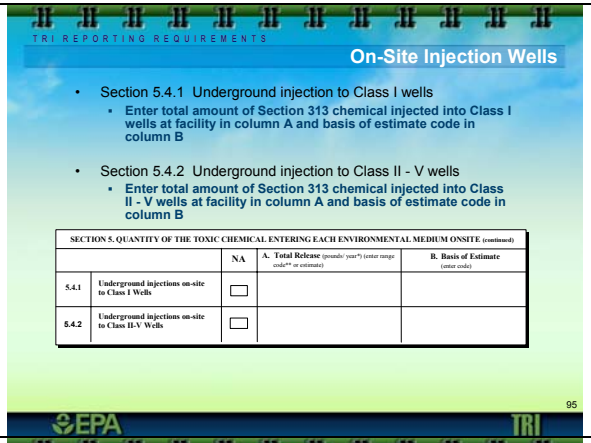
Notes:

Here is an example calculation for wastewater discharges using already existing and available monitoring data. This example is for methanol discharges, where this facility collected samples twice during the reporting year. The first sample was taken on March 1st, when the chemical was released at a concentration of 1.0 milligrams per liter with a flow rate of 1.0 million gallons per day. Converting milligrams per liter and million gallons per day into pounds per day results in 8.33 pounds per day by applying the appropriate conversion factors. Their second sample was taken on September 8th, where they measured the chemical at a concentration of 0.2 milligrams per liter, at a flow rate of 0.2 million gallons per day. Calculating that with the appropriate conversion factors again, comes out to 0.33 pounds per day. The two samples of 8.33 and 0.33 pounds/day are averaged to get 4.33 pounds per day.

The number that goes on the Form R is not in pounds per day, but in pounds for the reporting year. So, this quantity must be multiplied by the operating days, say 365 days, to get the total pounds per year.

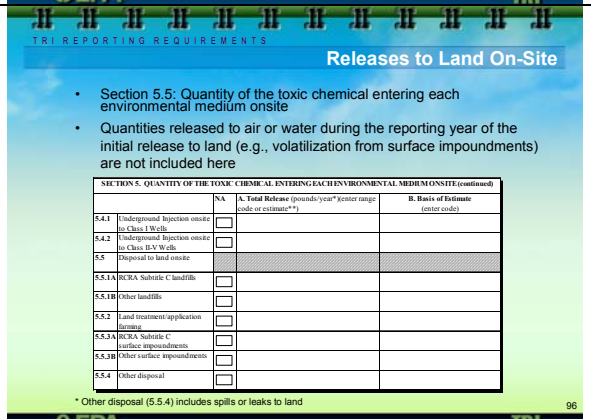
The second method shown, labeled “other way,” shows a method where the two concentrations are averaged and then separately the two flow rates are averaged to calculate pounds per day. This method is not as accurate because the concentration and the flow rate specific to each sample should stay together. Note that the basis of estimate code for this calculation is “M2” for periodic monitoring.

Slide 95
On-Site Injection Wells
Duration: 00:00:35



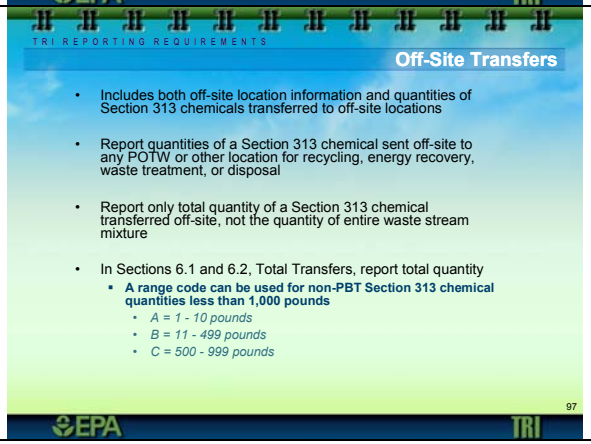
Notes:
Section 5.4 of Form R covers releases of the TRI chemical to underground injection wells. Underground injection wells are classified and regulated under the Safe Drinking Water Act. Quantities are entered for Class one wells in section 5.4.1 and for Class two through five wells in seccgtion 5.4.2. Facilities that do not have underground injection wells should check “NA” in this section.

Slide 96
Releases to Land On-Site
Duration: 00:00:44



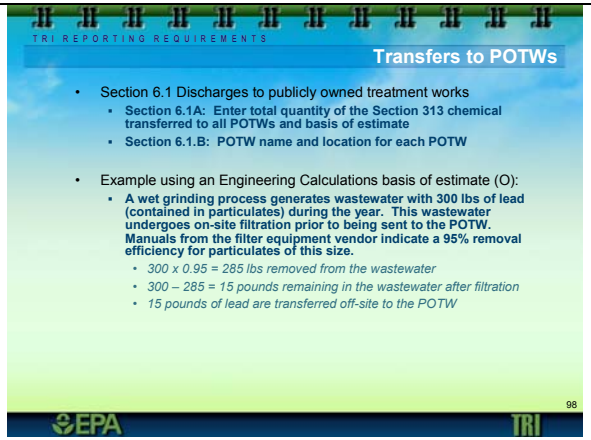
Notes:
In section 5.5 of Form R, facilities report the quantity of the chemical released to the land via onsite RCRA subtitle C landfills, other landfills, land treatment or land farming, RCRA Subtitle C surface impoundments, other surface impoundments, and other disposal. “Other disposal” includes any spills or leaks to land. Note that if a portion of the TRI chemical that is disposed of to land onsite volatilizes to the air or washes to a water body during the reporting year, that quantity is not reported here, but in the section most appropriate for that medium.

Slide 97
Off-Site Transfers
Duration: 00:00:42



Notes:
Section six of Form R covers off-site transfers of the TRI chemical. These include any transfers of the TRI chemical to another facility for the purpose of waste management including off-site waste treatment, recycling, energy recovery, or disposal. As in Section 5, any quantity reported in Section 6 that is under 1,000 pounds AND that is for a non-PBT chemical can instead be represented by one of the range codes shown here. Also, as in Section 5, basis of estimate codes are required for each quantity entered.

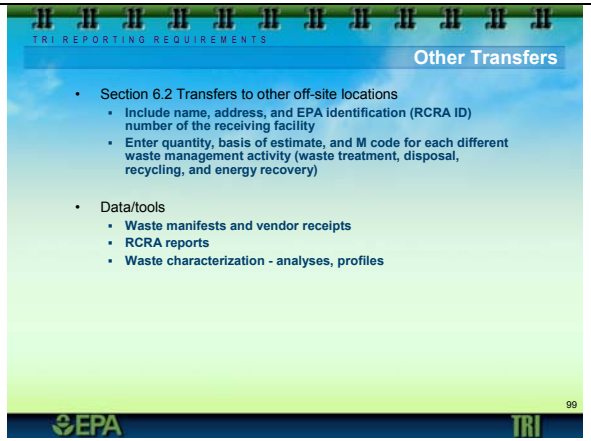
Slide 98
Transfers to POTWs
Duration: 00:00:56



Notes:

Section 6.1 of Form R is specifically for TRI chemical that is transferred to a publicly owned treatment works, or POTW. Both the total quantity of the amount transferred and the name of the POTW must be entered. In the example shown here, a facility used engineering calculations to determine that it generated wastewater containing 300 pounds of lead particulates during the reporting year. Before being discharged to the POTW, the wastewater underwent a filtration step that was thought to have a 95 percent removal efficiency for this size of particulates. Therefore, the quantity of lead reported as transferred to the POTW is 15 pounds and the basis of estimate code for this combination of estimation techniques is “O”.

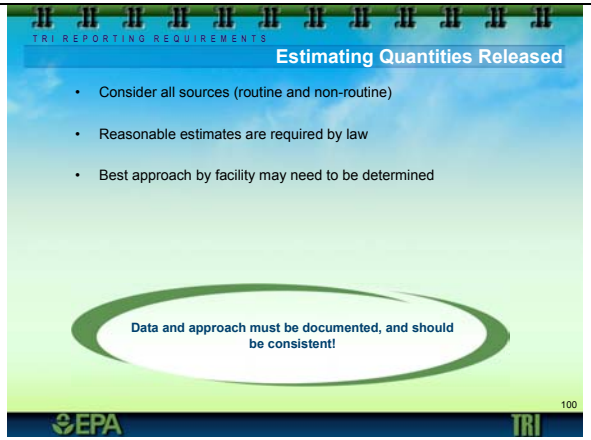
Slide 99
Other Transfers
Duration: 00:01:04



Notes:

Section 6.2 covers all other transfers of the TRI chemical off-site for waste management. The name, address and EPA ID, if applicable) of the facility receiving the TRI chemical is entered. For each off-site location, the quantity and basis of estimate code associated with each waste management activity are entered. The types of waste management activities are specified using the appropriate “M code” for each activity. The list of “M codes” are available in the “Reporting Forms and Instructions” document as well in the TRI-ME electronic reporting applications. The quantities of TRI chemical sent off-site to be managed as waste are often recorded by facilities as part of their regulatory requirements and recordkeeping systems. Facilities should take advantage of existing sources of information to assist with developing their estimates for this and other sections of the TRI form R.

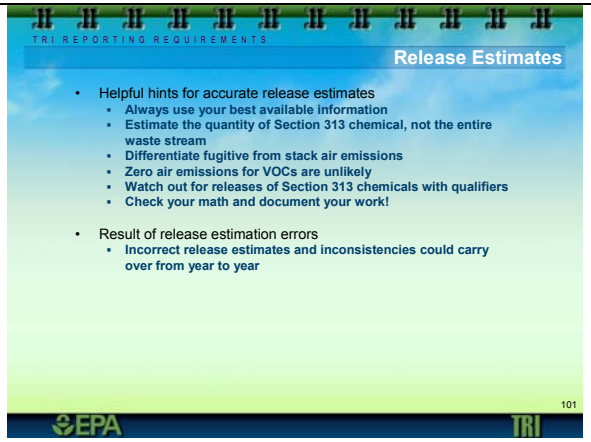
Slide 100
Estimating Quantities Released
Duration: 00:01:03



Notes:

When estimating release and waste management quantities for sections 5 and 6 of Part two of the Form R, be sure to consider all sources and uses of the TRI chemical, not just your main feedstocks. For example, consider chemicals that are used to clean production equipment, fuels, maintenance chemicals, catalysts, and lubricants for machinery. These all could be sources of TRI chemicals.
Reasonable estimates are required by law. However, the best approach is usually facility-specific. The data and approach must be documented and should be consistent. Facilities are required to use their best available information. While measuring and monitoring are not required by TRI, it may be that existing measurements and monitoring data are the best available information. Facilities need to determine the best reasonable approach to their estimates.

Slide 101
Release Estimates
Duration: 00:01:23



Notes:

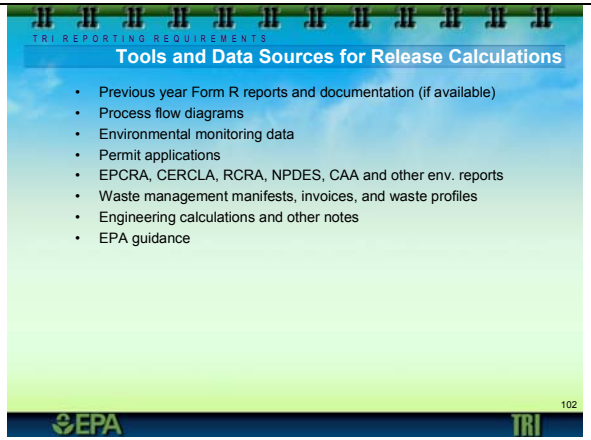
Here are a few helpful hints for estimating release and waste management quantities reported on the Form R. First, consider all sources of information and use the best available information for release and waste management estimates.

Be sure to estimate the quantity of the TRI chemical and not the entire waste stream. For example, when using data from a waste manifest that shows the weight of the entire waste mixture sent off-site, be sure to base release and waste management estimates on only the amount of the TRI chemical in that waste mixture.
Be sure to differentiate between your fugitive and your stack air emissions.

When reporting for a VOC, or volatile organic compound, be sure to estimate fugitive losses of the chemical – it is unlikely to have zero fugitive air emissions. Pay attention to the TRI chemical qualifiers and remember that the form of the chemical described in the qualifier is the only form that needs to be considered for TRI.

Also, always check your math and document your work. Be aware that errors can carry over from year to year.

Slide 102
Tools and Data Sources for Release Calculations
Duration: 00:01:14

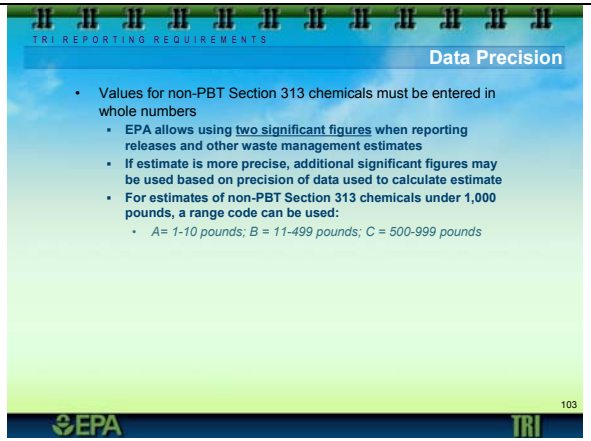


Notes:

Where should facilities get the information to calculate their releases and waste management quantities for Form R? A few sources are listed here. Previous year Form R reports and documentation are a starting point for many TRI filers. Process flow diagrams, monitoring data – again, facilities are not required to collect it for TRI, but many facilities have already collected it for other purposes. Environmental permit applications are another source – often, permit applications require extensive data collection that may be useful for TRI reporting.

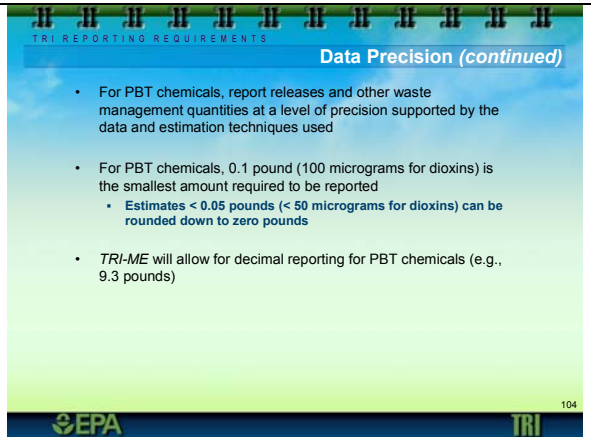
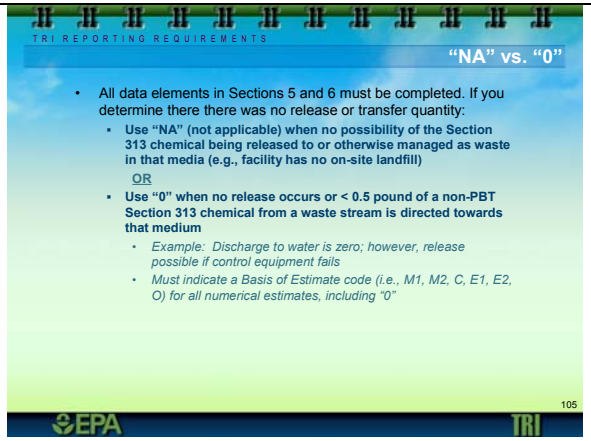
Other environmental reports may be helpful sources – for example, some states require pollution prevention reports. Some facilities must complete RCRA biennial reports. Some facilities conduct wastewater monitoring and submit discharge monitoring reports that may include TRI chemicals. Be sure to look across media for potential sources. Waste management manifests can be a good source of information for estimating the quantity of a chemical sent offsite.

Slide 103
Data Precision
Duration: 00:00:60

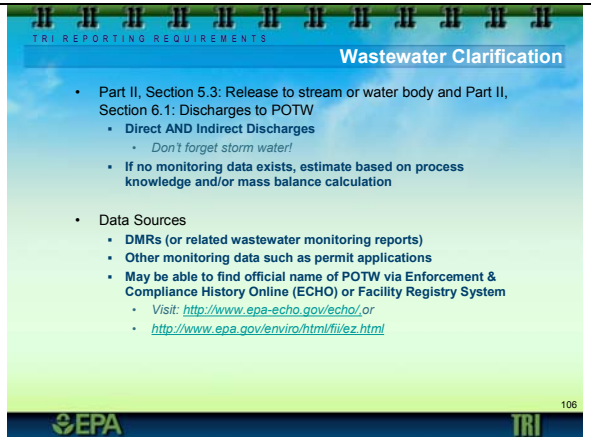


Notes:

Be as precise as possible when reporting release and waste management quantities. For non-PBT chemicals, facilities report release and waste management quantities in whole numbers. In other words, no decimal numbers for non-PBT chemicals. For non-PBT chemicals, quantities of a half pound or less can be rounded down to zero. In general, EPA requests two significant figures, if available. If your estimate is more precise, additional figures should be used. However, the level of precision reported should be based upon the precision of the underlying data used in the calculations. However, for non-PBT chemicals, range code reporting allowed in sections 5 and 6 for quantities less than 1,000 pounds. Range codes cannot be used for PBT chemicals.

Slide 104 **Data Precision (continued)** Duration: 00:00:59		**Notes:** Data precision requirements are different for PBT chemicals, because of the much lower thresholds associated with these chemicals. While non-PBT chemicals are reported to the nearest whole number, for PBT chemicals, facilities report to the nearest 10th of a pound. The exception is for dioxin, where quantities should be reported to the nearest 100 micrograms. For PBT chemicals, reported quantities can be rounded down to zero if less than .05 pounds. Quantities of 50 micrograms or less of dioxin can be rounded down to zero. When using the TRI-ME desktop or TRI-ME web reporting applications, the systems recognize the chemicals as PBT or non-PBT and will allow decimal reporting for PBT chemicals and not for non-PBT chemicals.
Slide 105 **"NA" vs. "0"** Duration: 00:01:30		**Notes:** It is important for TRI filers to understand the difference between reporting a zero and reporting "N/A," for "not applicable." Use "N/A" when there is no possibility of that chemical being released to or otherwise managed as waste in that medium. For example, in Section 5 of the Form R, facilities enter the quantity of the TRI chemical that went to their on-site landfill. If the facility does not have an on-site landfill, there is no way that the chemical could go to an on-site landfill, so they report "N/A". Facilities should use zero when no release occurs or less than half a pound of the non-PBT chemical is directed towards that medium. For example, if a facility has a waste stream discharged to water and has control equipment in place that completely removes the TRI chemical from the waste stream prior to discharge, they would enter a zero as the quantity discharged. They use a zero instead of N/A because a discharge is possible if, for example, their control equipment was not removing 100% of the chemical. Note that a Basis of Estimate code is required for all numerical estimates, including zero. A Basis of Estimate code should not be entered when "N/A" is reported.

Slide 106
Wastewater Clarification
Duration: 00:01:16

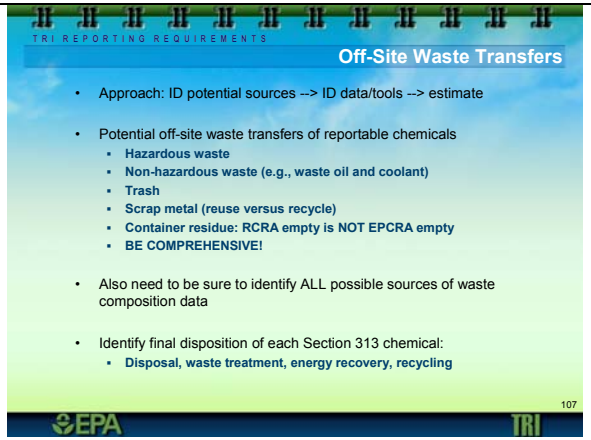


Notes:

Facility wastewater discharges are reported in two places on the Form R. The quantity of the specific TRI chemical that is reported as released directly to a stream or water body, either through a discharge pipe or through storm water, goes in Section 5.3. The other place on the Form R where facilities could enter wastewater discharges are in Section 6.1 for discharges to a POTW. These are considered offsite transfers for further waste management.

To calculate the quantity of the TRI chemical discharged, facilities may have monitoring data available, such as may be required under a NPDES report. If no monitoring data exist, facilities should use the most appropriate methods including general process knowledge and mass balance calculations. Note that Section 6.1 requires the name of the POTW to which the TRI chemical is being transferred. Facilities may be able to find the official name of their POTW from one of the EPA websites shown here.

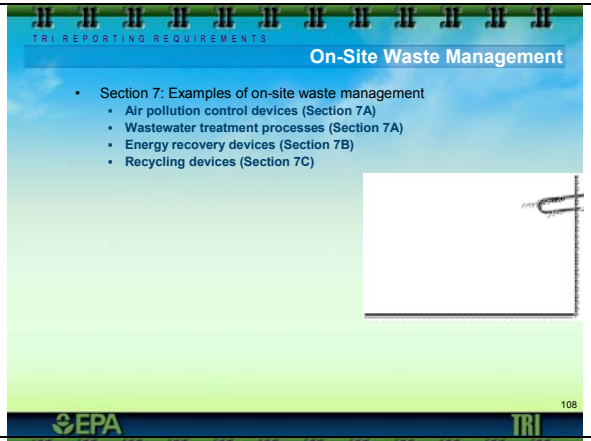
Slide 107
Off-Site Waste Transfers
Duration: 00:01:38



Notes:

Here are some tips specific to reporting quantities in Section 6 of the Form R. First, Identify all possible sources of waste sent off-site. Hazardous waste is one source and waste manifests may be helpful in calculating the quantity of some TRI chemicals sent off-site. However, also consider TRI chemicals in non-hazardous wastes, such as chemicals in waste oil, coolant, trash, or scrap metal. Also consider container residue – the RCRA definition of an "empty" drum may still contain TRI chemicals. These quantities need to be included as off-site transfers on Form R. For all quantities of the TRI chemical sent offsite for waste management, remember to record the "M" code, describing how the chemical was managed offsite. If a waste going offsite for incineration contained 100 pounds of the TRI chemical, 100 pounds would be reported in section 6.2 along with the name and location of the site it is being sent to, and the "M code" for incineration. If another waste stream contained 300 pounds of the same TRI chemical and was being sent to a different location for metals recovery, the 300 pounds would be listed separately, along with the name and location of the receiving facility, and the M code for metals recovery.

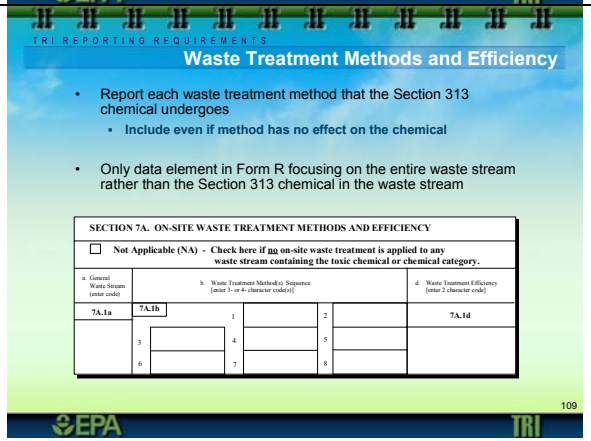
Slide 108
On-Site Waste Management
Duration: 00:00:31



Notes:

Let's move on to Section 7 of the Form R. In Section 7, facilities don't report actual quantities, but instead describe the waste treatment energy recovery and recycling processes that the TRI chemical goes through at the facility. Section 7 is divided into separate subsections describing how the TRI chemical is treated for destruction on-site, recovered for energy on-site, and recycled on-site.

Slide 109
Waste Treatment Methods and Efficiency
Duration: 00:01:09



Notes:

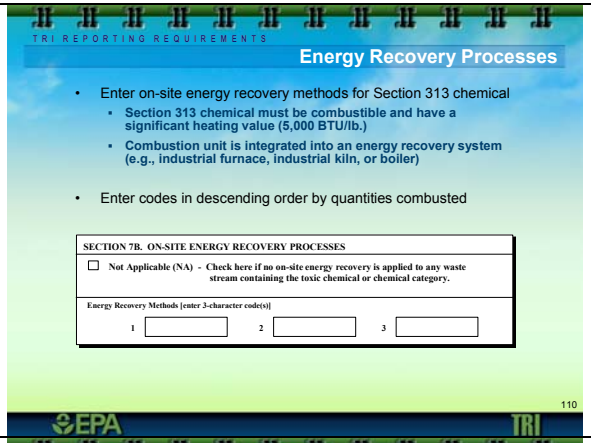
Section 7A covers on-site waste treatment methods. Under TRI, "treatment" means that the waste chemical is removed or destroyed. In section 7A.1a, facilities describe each waste stream containing the TRI chemical using a "waste stream code" that denotes whether the waste stream is solid, liquid, or gaseous. In Section 7A.1b, facilities enter the codes that represent each of the waste treatment methods that the waste stream goes through in order. All treatment methods must be recorded, even if the method does not affect the TRI chemical. Finally, in 7A.1d, the facility reports a code that represents the range of treatment efficiency that the combined waste treatment methods had on the TRI chemical.

Note that all of the codes required for Section 7 can be obtained from the "Reporting Forms and Instructions" and through the TRI-ME and TRI-ME web reporting applications.

Slide 110

Energy Recovery Processes

Duration: 00:00:25



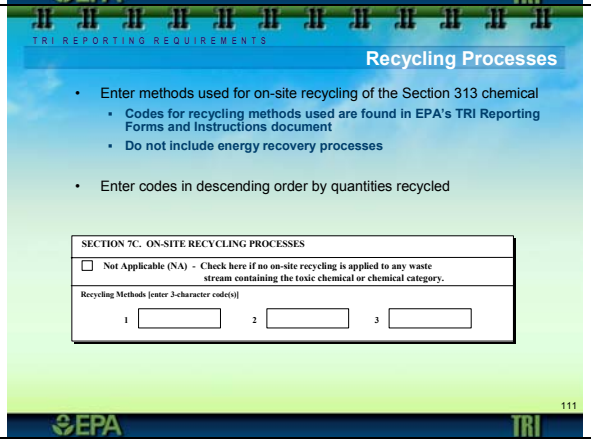
Notes:

Section 7B covers on-site energy recovery processes that the TRI chemical goes through. Only chemicals that have a significant heat value and for which the heat energy is actually recovered should be reported in this section. Codes representing each energy recovery method that the TRI chemical enters are reported in section 7B.

Slide 111

Recycling Processes

Duration: 00:00:25



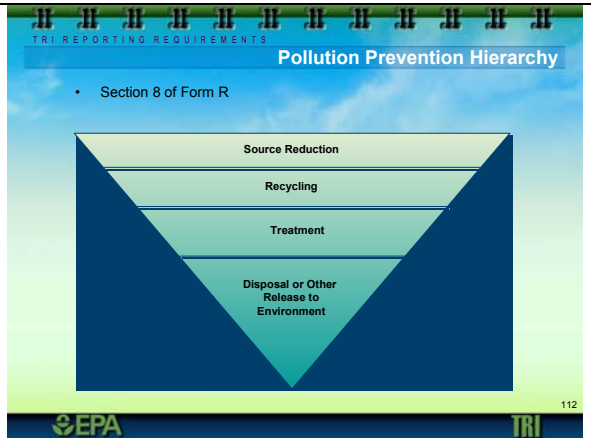
Notes:

Section 7C covers on-site recycling processes that the TRI chemical goes through. Note that recycling recovers the TRI chemical from the waste stream so that it can be used over again. It does not include energy recovery. Codes representing each recycling method that the TRI chemical enters are reported in section 7C.

Slide 112

Pollution Prevention Hierarchy

Duration: 00:01:35



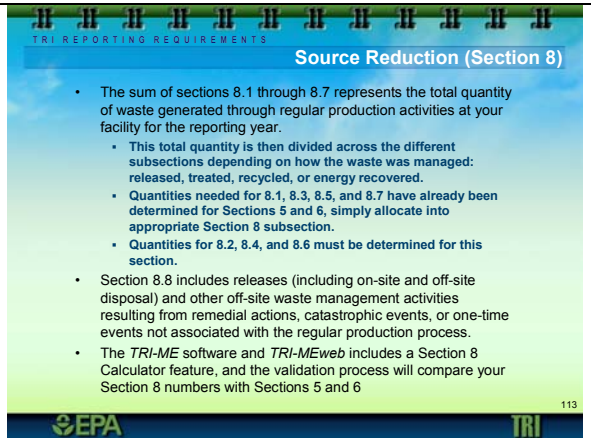
Notes:

Now we're going to go through some pointers on Section 8 of the form. Section 8 is the section of Form R focused on pollution prevention. This pollution prevention hierarchy shown here was institutionalized by the Pollution Prevention Act of 1990, and the idea here is that facilities always want to be moving up this triangle toward source reduction. Facilities should look for opportunities for source reduction and think about how they can you avoid creating wastes in the first place. If that is not possible, they should look at opportunities for recycling the chemical. If that's not possible, they move down the hierarchy and determine if the chemical be treated. If there is no way to destroy the chemical, then their last resort is disposal or release to the environment. So, we always want to be evaluating ways to move towards source reduction. Section 8 of the TRI Form R is intended to help track progress and identify opportunities for pollution prevention. In Section 8, facilities report quantities for the current reporting year, as in the other sections of the form, but quantities are also reported for the previous year, and they are projected out for the next two years. This provides a trend over time to look at to determine if there are more opportunities to move up this pollution prevention hierarchy.

Slide 113

Source Reduction (Section 8)

Duration: 00:02:23



Notes:

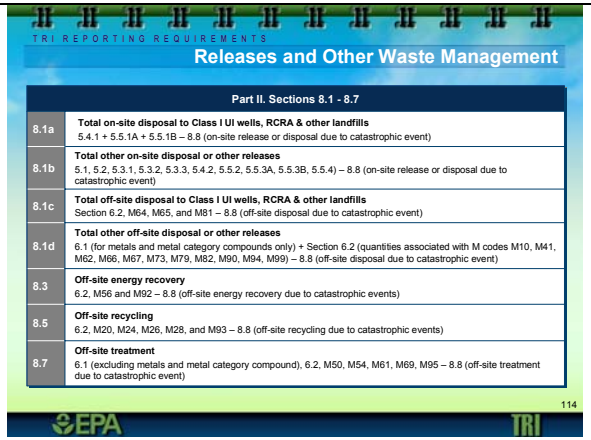
Now we will discuss the details of completing Section 8 of Form R.

In Section 8.1, the quantity of the chemical released is reported. In Sections 8.2 and 8.3, the quantities of the chemical used for energy recovery on-site and off-site are reported. To be reported as energy recovery, the TRI chemical must have a significant heat value and that heat must be recovered. In Sections 8.4 and 8.5, the quantities of the chemical recycled on-site and off-site are reported. And, in Sections 8.6 and 8.7, the quantities of the chemical treated on-site and off-site are reported. Under TRI, treatment means “destroyed”, so metals, which cannot be destroyed, should not be reported in these sections.

Adding up the quantities in section 8.1 through 8.7 gives the total quantity of waste generated from production activities at the facility. This includes the total quantity released, treated, recycled, or used for energy recovery. Some of these quantities, such as releases and off-site transfers of chemicals, may have already been calculated to complete sections 5 and 6 of the Form. The TRI-ME and TRI-ME web applications include a Section 8 calculator tool that will help with these calculations. However, the quantities reported in sections 5 and 6 of the form can differ from those reported in Sections 8.1 through 8.7. The sections 5 and 6 quantities can include TRI chemical released and transferred as part of a remedial clean-up action or catastrophic one time event.

In section 8, the quantity of TRI chemical released or transferred offsite as part of a remedial clean-up or catastrophic events is separated out and reported in Section 8.8. This quantity is TRI chemical managed as waste from one-time events not associated with the regular production process.

Slide 114
Releases and Other Waste Management
Duration: 00:01:43

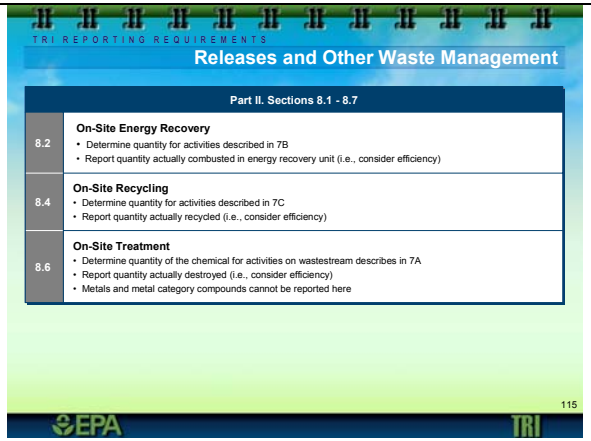


Notes:

This table shows the subsections of Section 8 that may be derived from information that was already recorded in Section 5 (onsite releases) and in Section 6 (offsite transfers) of the Form R. For example, all the quantities recorded for the chemical as on-site releases are all reported in Section 8.1. Section 8.1 is the quantity of the chemical released and disposed, onsite and offsite. Offsite releases and disposals come from the part of the Form R where offsite transfers are entered, and includes only those transfers that were ultimately be released or disposed rather than treated or recycled or used for energy recovery. Recall that for each off-site transfer, a code was entered representing the disposition of that chemical.

Also, information for Sections 8.3, 8.5, and 8.7 may have already been calculated in other parts of the form. Here we direct you to where in the Form these quantities may have already been reported. Why re-enter quantities that have already been entered elsewhere on the form? It is so the information can be viewed in a format that helps with the identification of pollution prevention opportunities. The TRI-ME and TRI-ME web applications' Section 8 calculator tool helps with all these sections. It will automatically generate the numbers from Sections 5 and 6 and gives an opportunity to check them over before entering them into Section 8.

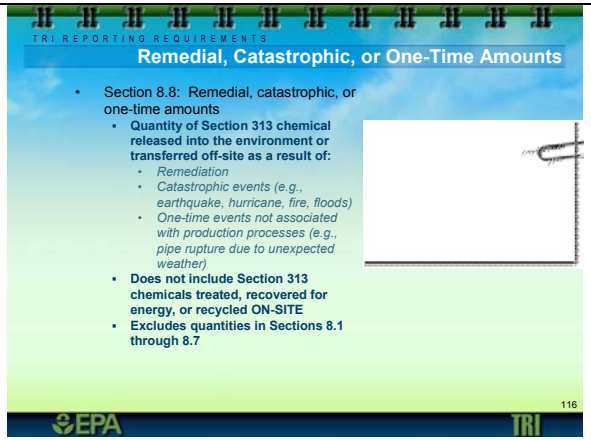
Slide 115
Releases and Other Waste Management
Duration: 00:01:00



Notes:

The three subsections of Section 8 shown here are different from the other subsections already discussed in that the waste management quantities have not already been considered in previous sections of the Form R. In sections 8.2, 8.4 and 8.6, facilities report the quantities of the TRI chemical used for on-site energy recovery, on-site recycling, and on-site treatment, respectively. Again, to be reported as energy recovery, the TRI chemical itself, and not only the entire wastestream, must have an energy value and be must be combusted in an energy recovery unit. To be reported as recycling, the TRI chemical itself must be recycled. And to be reported as treatment, the TRI chemical itself must be destroyed. Note that metals cannot be destroyed.

Slide 116
Remedial, Catastrophic, or One-Time Amounts
Duration: 00:01:24

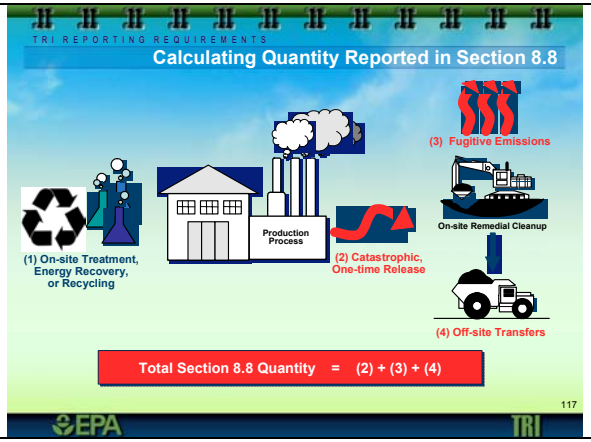


Notes:

Section 8.8 is where facilities enter the quantities of the TRI chemical that were released to the environment or transferred offsite due to remediation activity, or catastrophic or one-time events. This does not include chemicals that are treated onsite, recovered for energy onsite, or recycled on-site, no matter how those chemicals were generated. Note that the quantities in Section 8.8 are exclusive of the quantities entered in Section 8.1 through 8.7; there is no overlap. For example, if a facility has an ongoing remedial action for a TRI chemical, and there are fugitive releases to the air associated with that remedial action, the quantity of the chemical released to the air is not reported in section 8.1 because the release is from the remedial activity. The quantity is reported in Section 8.8.

Also note that quantities reported in Section 8.8 do include preventable quantities, like those associated with spills from a production process, or a leaking pipe, or anything that could have been prevented, such as through more rigorous prevention or maintenance procedures.

Slide 117
Calculating Quantity Reported in Section 8.8
Duration: 00:00:41



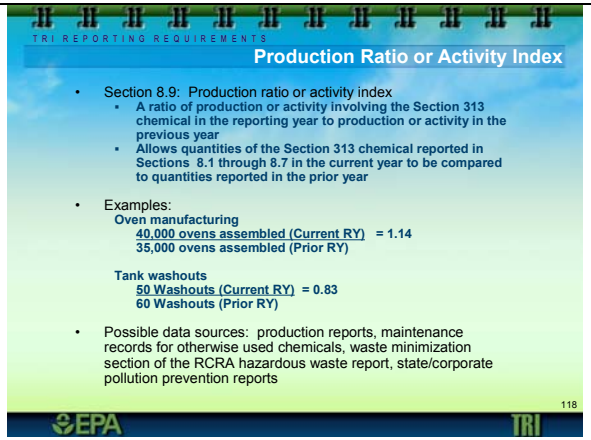
Notes:

Here we show a manufacturing process where there is a catastrophic one-time release – the quantity of the TRI chemical in that release is reported in Section 8.8. There is also a remediation activity at the site. Fugitive emissions and off-site transfer of the TRI chemical from the remediation are also reported in Section 8.8. However, any quantity of the chemical from either of these events that is treated onsite, used onsite for energy recovery, or recycled onsite, is reported in Sections 8.1 through 8.7.

Slide 118

Production Ratio or Activity Index

Duration: 00:03:47



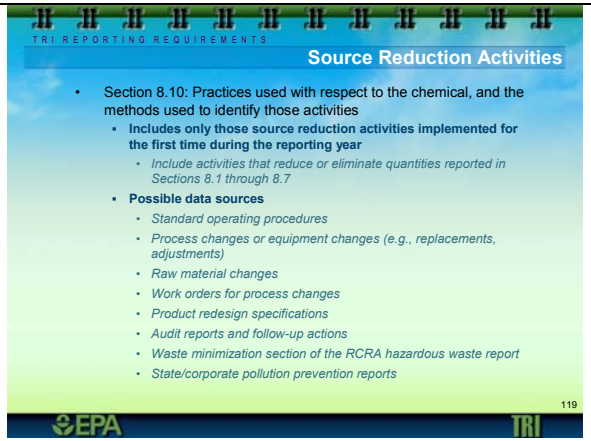
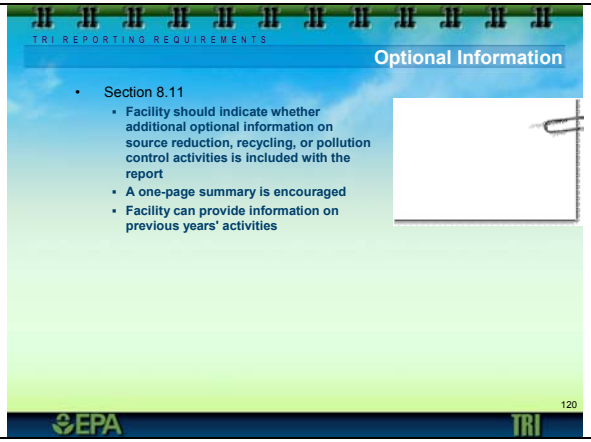
Notes:

The production ratio or activity index for the chemical goes in Section 8.9. The production ratio is a unitless value that compares this year's production involving this chemical to last year's production. This helps facilities examine trends in their quantities released and managed. For example, releases could be decreasing over time because pollution prevention is being implemented resulting in increased efficiency. Or releases could be decreasing because production is going down. Let's go through a couple of examples to illustrate this.

The first example is an oven manufacturer, and at this facility 40,000 ovens were assembled this reporting year, compared to 35,000 ovens assembled in the prior reporting year. So dividing 40,000 by 35,000 results in a production ratio of 1.14. This is a unitless value. 1.14 would represent a 14% increase in production from last year to this year. But neither 14, or 0.14 should be reported. Only 1.14, the actual ratio, should be reported.

Perhaps the TRI chemical use has no connection to production. Alternatively, facilities may use an activity index instead of a production ratio. In the activity index example shown here, a chemical is used in tank washouts. There were 50 washouts this year compared to 60 the last year. That would result in an activity index of 0.83.

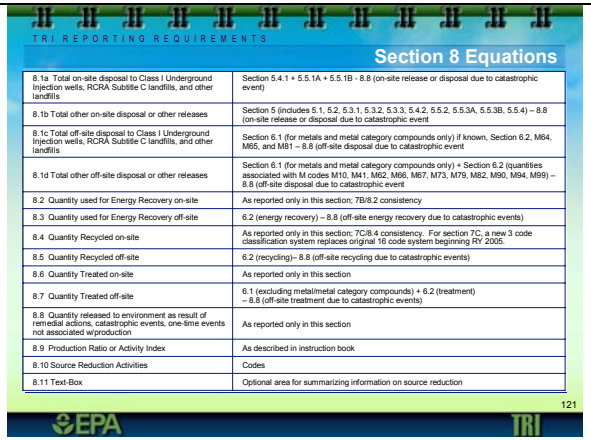
The facility must decide if a production ratio or an activity index best reflects the use of the chemical for which they are reporting. For example, if the facility is reporting on a chemical that is in the paint used to paint ovens, using the number of ovens would be a good production ratio. As they make more ovens, they are going to be using proportionally more of the paint, if they do not implement any pollution prevention practices. However, if the chemical is used in a cleaning solution to clean tanks, it may be that the facility is increasing production by running larger jobs that require fewer cleanings. Production isn't a good indicator of the year-to-year use of that chemical, so they would opt for using an activity index instead. If a facility does implement pollution prevention practices, they still may see their chemical use remain the same even though their production ratio is greater than one, meaning their production is going up. That would indicate they are using less of the chemical per unit of product.

Slide 118 - Continued **Production Ratio or Activity Index** Duration: 00:03:47		**Notes:** Another note, this number can never be negative (since we are dividing two positive numbers). If production is going up, the production ratio is going to be greater than one. If production is going down, the production ratio or activity index is going to be less than one, as in the tank washout example. Barring significant changes in production or activities at a facility, most production ratios and activity indexes are within 0.5 and 2, which would indicate a 50 percent decrease and a 100 percent increase in production or activities, respectively.
Slide 119 **Source Reduction Activities** Duration: 00:00:51		**Notes:** In section 8.10 of the Form R, facilities report on the source reduction, or pollution prevention activities, implemented during the reporting year that could reduce or eliminate quantities of the chemical reported in sections 8.1 through 8.7 of the form. The various source reduction activities are represented by codes that can be found in the "Reporting Forms and Instructions" document as well as in the TRI-ME desktop and TRI-ME web applications. There are many types of activities that could be considered source reduction activities. Some are listed here. Reporters should review these codes, because they may not realize that some of the activities that they have implemented during the year would count as source reduction.
Slide 120 **Optional Information** Duration: 00:00:21		**Notes:** In section 8.11, facilities can provide any additional information on their source reduction, recycling, or pollution control activities to supplement their TRI report. The information may include activities from previous years. This section of the TRI Form is optional.

Slide 121

Section 8 Equations

Duration: 00:01:50



Notes:

Because much of the information reported in section eight of the TRI Form R has been reported in sections five and six, which deal with on-site releases and off-site transfers, equations have been developed to help facilities correctly complete section eight based upon what they reported in sections five and six. The equations are shown here for reference.

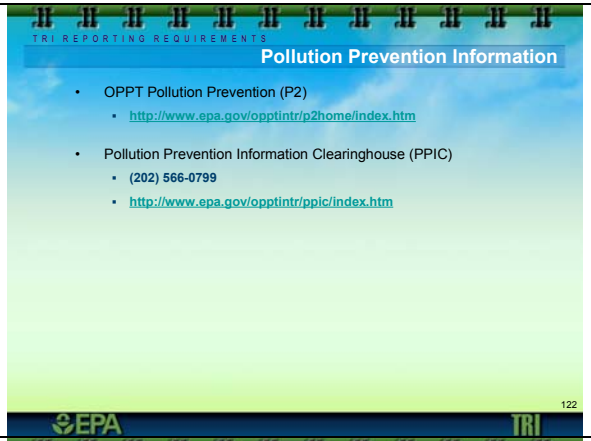
For example, in the first row, section 8.1a, facilities report the total on-site disposal of the TRI chemical to Class I Underground Injection wells, RCRA Subtitle C landfills, and other landfills. This information was already reported in Section 5.4.1, 5.5.1a, and 5.5.1b on the TRI Form R. Because section 8.1a does not include any quantity of TRI chemical that was released as a result of a remedial action or catastrophic event or one-time event, and this information IS included in section five, we therefore need to subtract any quantities associated with remedial action or catastrophic event or one-time events that were reported in section five. These equations are available for most parts of section 8 of the TRI form.

Facilities that use the TRI-ME desktop and TRI-ME web reporting applications are assisted in this process by the automatic calculators that are part of these tools. In addition, prior to completing and submitting the Form, the TRI-ME software runs a validation to make sure that the information provided in section eight and sections five and six do not conflict.

Slide 122

Pollution Prevention Information

Duration: 00:00:18



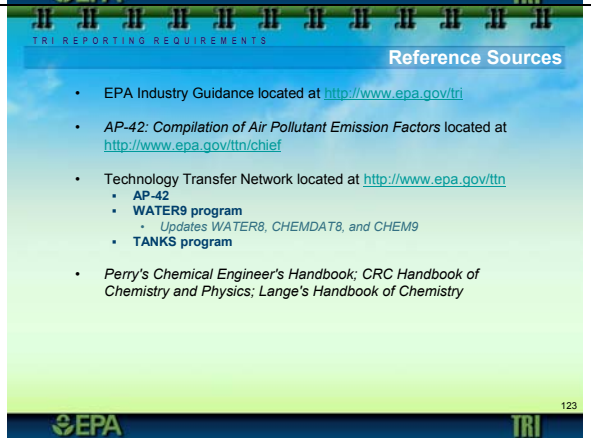
Notes:

Facilities that are interested in using source reduction techniques to reduce their TRI chemical use and wastes can get assistance from the EPA's office of Pollution Prevention and the Pollution Prevention Information Clearinghouse, at the websites and telephone number shown here.

Slide 123

Reference Sources

Duration: 00:01:11



Notes:

Here are some addition sources of information and assistance with the TRI reporting, in general. The first is the TRI program homepage which has a great deal of chemical-specific and industry-specific guidance and all of the reporting forms and instructions.

In addition, EPA's air pollution emission factors are available in a document called the AP-42. The Website for that is also shown here.

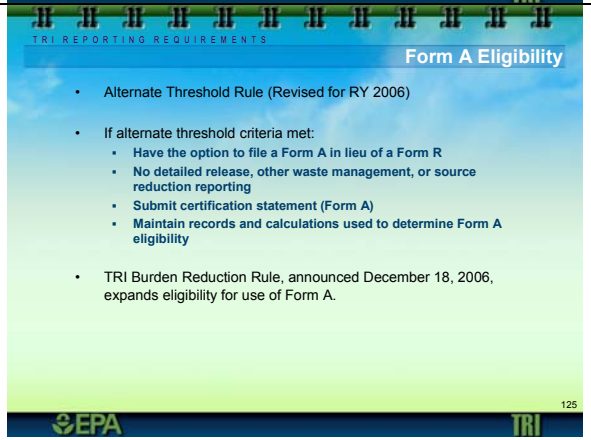
There is also a software program called the WATER9 program. This is a PC-based software that assists with estimates of the fate of organic compounds in various wastewater treatment units.

TANKS9 is also a PC-based program used to estimate emissions of organic chemicals from several different types of storage tanks. This software uses a database of over 100 different liquid organic chemicals. It includes meteorological data which – from over 250 cities in the US to help with those calculations. Those are both also available from the EPA Website shown here.

Slide 124
Section VII: TRI Form A
Duration: 00:00:05

Notes:

Slide 125
TRI Form A
Duration: 00:00:46

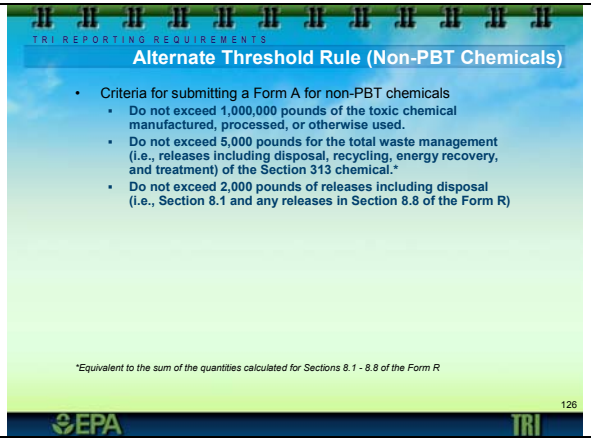


Notes:

In addition to the TRI Form R, there is an alternative form, called the Form A Certification Statement, that facilities can submit in lieu of the Form R, if they meet the criteria. Determinations for eligibility must be made on a chemical-by-chemical basis. The Form A can provide significant burden reduction because it does not require release or other waste management or source reduction information. It mainly is comprised of Part one of the Form R and the name and the CAS number of the chemical.

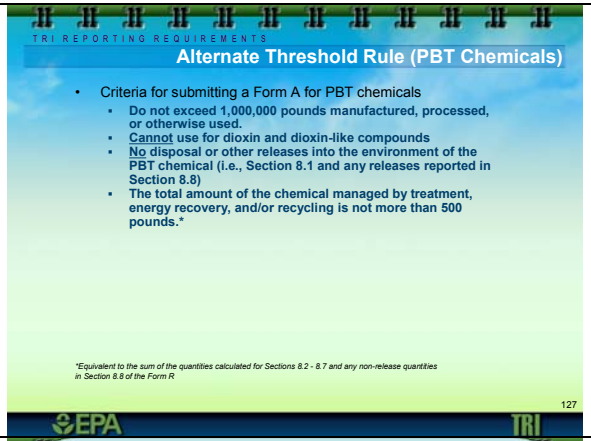
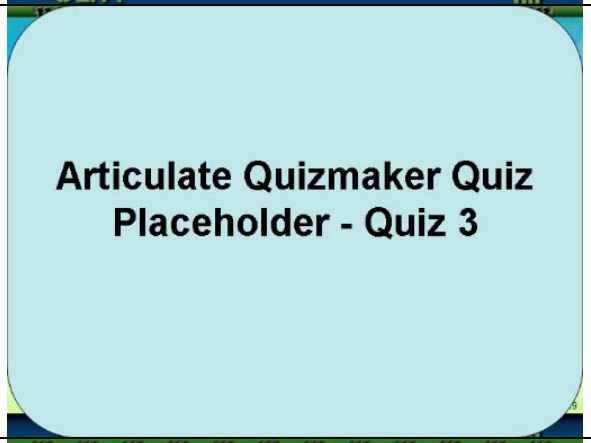
In reporting year 2006, EPA expanded the eligibility for the use of the From A certification via the Alternative Threshold Rule.

Slide 126
Alternate Threshold Rule (Non-PBT Chemicals)
Duration: 00:00:47



Notes:

The criteria for use of Form A varies depending on whether or not the chemical is PBT chemical or not. For non-PBT chemicals, in order to use the Form A, a facility must meet the following criteria. First, the facility cannot exceed one million pounds of the chemical manufactured, processed, or otherwise used. Second, the facility cannot exceed 5,000 pounds for the total waste management of the TRI chemical. And by waste management, again, we mean the releases, recycling, energy recovery, and treatment of the TRI chemical. And the facility cannot exceed 2,000 pounds of the TRI chemical released or disposed.

Slide 127 **Alternate Threshold Rule (PBT Chemicals)** Duration: 00:00:44		**Notes:** In previous years, Form A was not allowed for PBT chemicals. Starting in reporting year 2006, the Form A can be used for PBT chemicals, provided the following criteria are met. First, the facility cannot exceed one million pounds of the TRI chemical, manufactured, processed, or otherwise used. Second, it cannot be used for dioxin and dioxin-like compounds. Third, there can be no releases or other disposal into the environment of the PBT chemical. And fourth, facilities cannot exceed 500 pounds for recycling, energy recovery, and treatment of the TRI chemical.
Slide 128 **Quiz 3** Duration: 00:02:00		
Slide 129 **Section VIII: TRI Reporting Guidance** Duration: 00:00:05		**Notes:**

Slide 130

TRI Reporting Guidance

Duration: 00:01:52

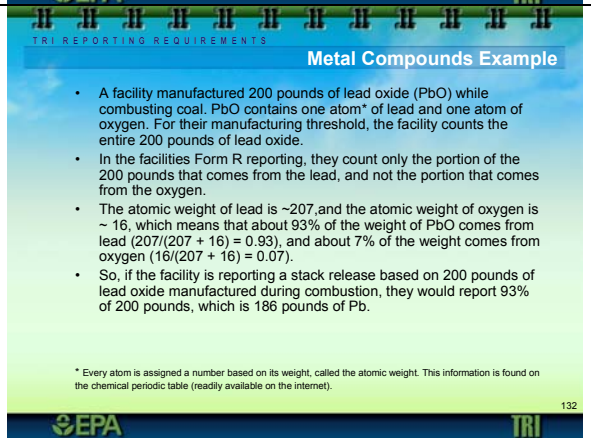
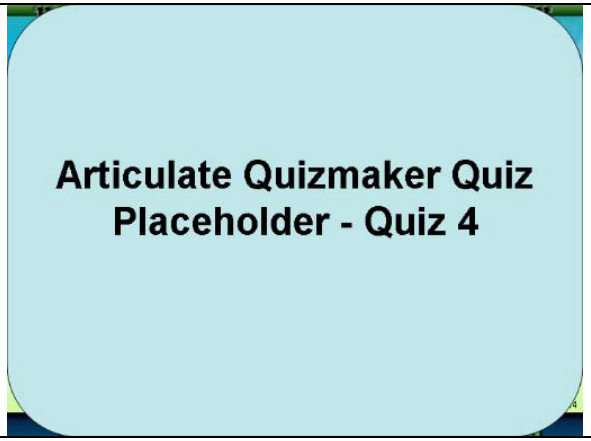
Notes:

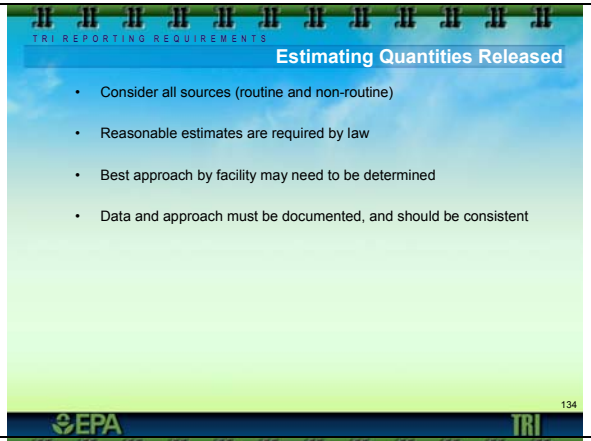
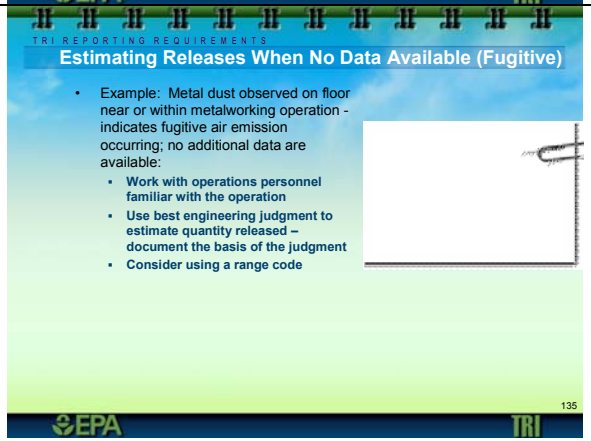
Now we are going to look briefly at some of the unique requirements associated with reporting for metals and metal compound categories. In the Advanced Concepts module, we look at these unique requirements and other special chemicals and chemical categories in more detail.

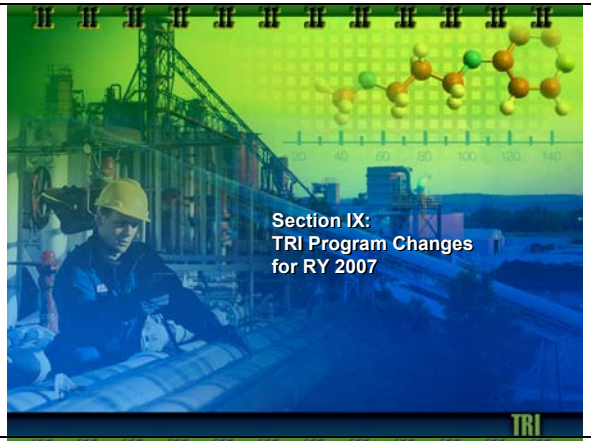
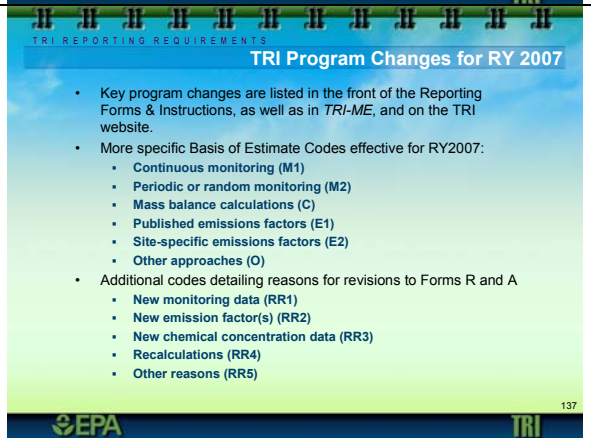
Note that metals and metal compound categories are separately listed chemicals under TRI. They each have a separate activity threshold determination – report on the metal only if the threshold for the metal is exceeded, and report for the metal compound only if the threshold for the metal compound is exceeded.

So if a facility handles elemental nickel and nickel compounds at their facility, they should look at the two separately when determining if they need to report. They look at the elemental nickel and see if they manufacture, process, or otherwise use quantities exceeding the threshold for nickel. Separately, they look at their nickel compounds and see if the quantity manufactured, processed, or otherwise used exceeds the threshold for nickel compounds. They look at the two as completely unrelated chemicals.

However, if the threshold is exceeded for both the elemental metal and for the metal compound – for example, both for nickel and for nickel compounds, then the option exists to either report separately or to file in one combined form. When combining the reports, the single report should be for the metal compound category. So, if the facility exceeded the threshold for nickel and they exceeded the threshold for nickel compounds, they could file for each separately, or they could file for the combined elemental nickel releases and releases from the nickel compounds on one report.

Slide 131 **Metal Compounds** Duration: 00:00:37		**Notes:** Here are a few more tips on metal compounds. When calculating the threshold quantities for metal compounds, use the total weight of the compound, not just the parent metal portion. So, when determining whether a report for a metal compound is necessary, calculate how much of the metal compound was manufactured or processed or otherwise used, and use the weight of the compound as a whole. For release and other waste management estimates – that's the information that goes on the Form R – use only the weight of the parent metal portion of the compound.
Slide 132 **Metal Compounds Example** Duration: 00:00:56		**Notes:** Here is an example of a facility that is coincidentally manufacturing lead oxide when combusting coal. They manufactured 200 pounds of lead oxide during the reporting year. All 200 pounds is applied to the manufacturing threshold for lead compounds. Because the threshold of 100 pounds is exceeded, the facility will submit a Form R. Knowing that the atomic weight of lead is about 207 and the atomic weight of oxygen is about 16, they determined that the lead makes up about 93 percent of the weight of the lead oxide. So, if all of the lead oxide manufactured is released to the air, the facility is going to report releases of lead oxide on the TRI Form R equal to 93 percent of the 200 pounds, which is 186 pounds.
Slide 133 **Quiz 4** Duration: 00:02:00		

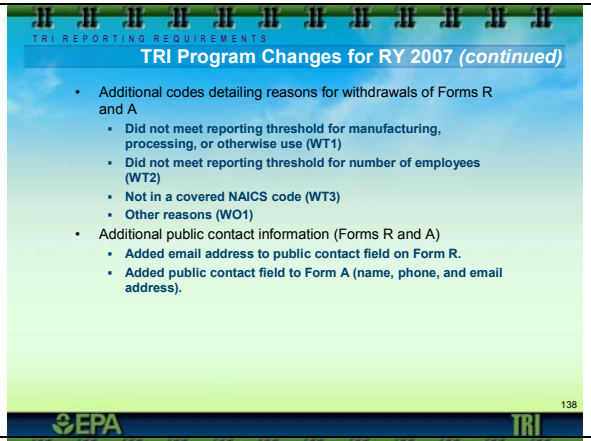
Slide 134 **Estimating Quantities Released** Duration: 00:00:36		**Notes:** Here are a few general tips for calculating releases and waste management quantities on the TRI Form R. First, be comprehensive and consider all possible sources throughout the reporting year. By law, facilities are required to come up with reasonable estimates based on the best available information. However, the best approach will vary from facility to facility and chemical to chemical, so facilities themselves need to determine the best approach. Be sure to document the data used and the approach.
Slide 135 **Estimating Releases When No Data Available (Fugitive)** Duration: 00:01:22		**Notes:** Another common question is: how do you come up with an estimate when there are no data available? This comes up often in the case of fugitive emissions. Facilities may have a process and a chemical for which they know that fugitive air emissions occur, based on the nature of the process or of the chemical, but do not know how to go about quantifying those fugitive emissions. The example shown here is for a metalworking operation where there is metal dust on the floor indicating fugitive air emissions are occurring. However, if the facility does no track or measure the dust, how can they quantify these fugitive emissions? Facilities can work with the operations personnel familiar with the operation in determining when the dust is generated, how it is generated, and its composition (and specifically how much of the TRI chemical in question does it contain). Then they use their best engineering judgment to indicate the quantity of release. Because it will not be a precise estimate, they may want to consider using a range code. They will also have to indicate the Basis of Estimate code for the quantity of fugitive emissions, which is likely the “O” Basis of Estimate code for engineering judgment.

Slide 136 **Section IX: TRI Program Changes for RY 2007** Duration: 00:00:05		**Notes:**
Slide 137 **TRI Program Changes for RY 2007** Duration: 00:01:12		**Notes:** Next we're going to talk about some of the recent updates in the current reporting year, which is reporting year 2007. The key program changes for every year can be found at the front of the Reporting Forms and Instructions document, which is available from the TRI Website. Also the TRI-ME desktop and TRI-ME web applications will provide information on the recent program updates as well. For reporting year 2007, EPA has revised and expanded the "Basis of Estimate" codes. The "monitoring" basis of estimate code has been replaced with codes for "continuous monitoring", M1, and "periodic or random monitoring", M2. The "emissions factor" basis of estimate code has been replaced with codes for "published emissions factors", E1, and "site-specific emissions factors", E2. Also, for reporting year 2007, EPA has added codes detailing the reasons for revisions to the Forms R and A. The codes and their meanings are shown here.

Slide 138

TRI Program Changes for RY 2007 (continued)

Duration: 00:00:30



Notes:

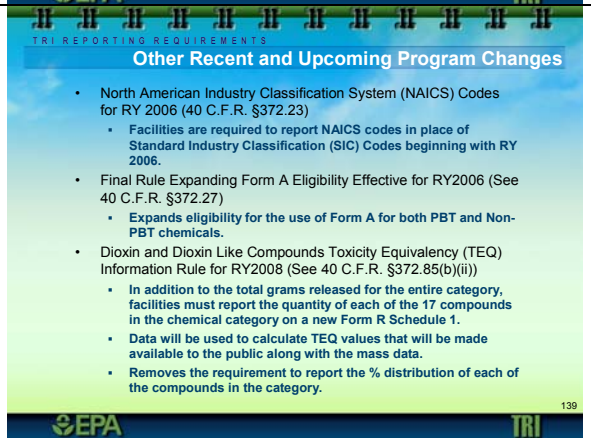
Similarly, for reporting year 2007, EPA has also added codes detailing the reasons for withdrawals of Forms R and A. The new codes are show here.

Finally, the TRI program has added additional public contact information to the forms. An email address for the public contact has been added to the Form R, and the public contact name, phone and email, has been added to the Form A.

Slide 139

Other Recent and Upcoming Program Changes

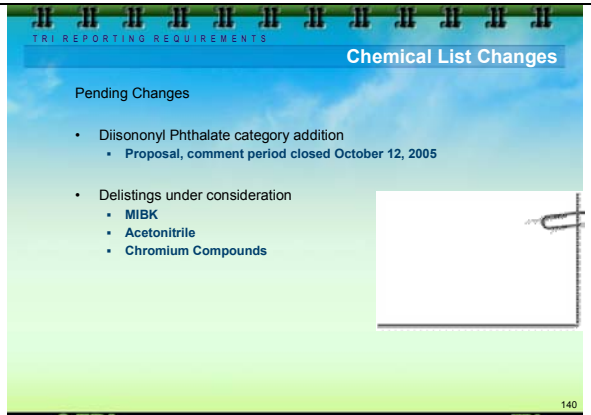
Duration: 00:01:09

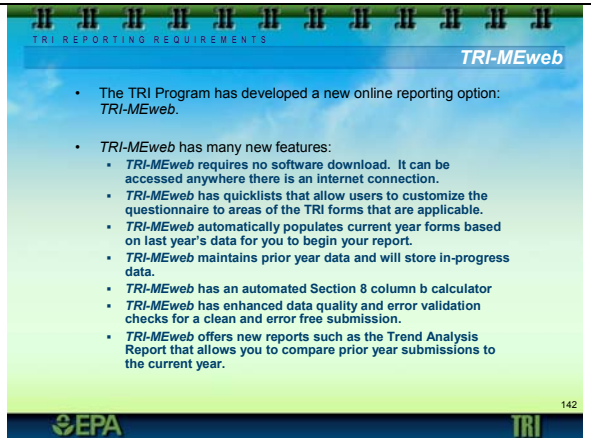
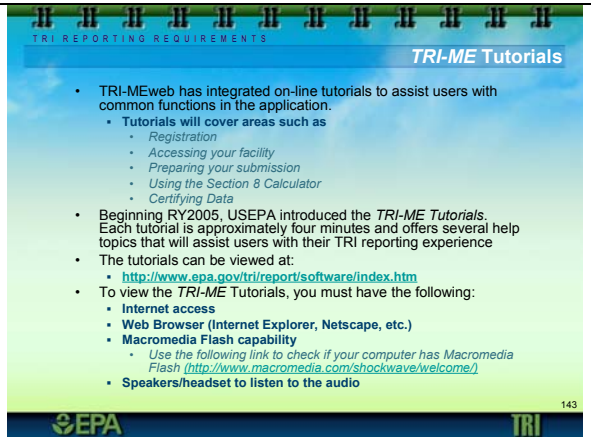


Notes:

Next we're going to talk about some of the other recent and upcoming program changes. As discussed earlier, for reporting year 2006, the TRI program switched from SIC codes to NAICS codes. So, beginning last year, facilities must report their NAICS codes in place of SIC codes. Also, in reporting year 2006, Form A eligibility was expanded so that now the Form A can be used for PBT and non-PBT chemicals if they meet the various requirements.

For reporting year 2008, there will be changes related to the reporting of dioxin and dioxin-like compounds. In addition to reporting on the grams of the chemical category managed as waste, facilities must report the quantity of each of the 17 compounds in the category on a new Form R Schedule 1. These data will be used to calculate toxicity equivalency values, which will be made available to the public along with the actual weights.

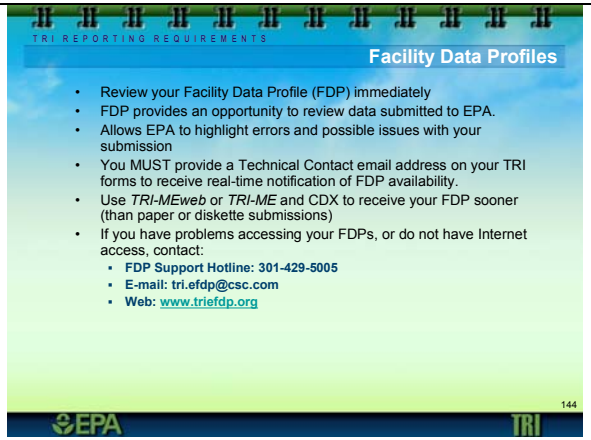
Slide 140 **Chemical List Changes** Duration: 00:00:36		**Notes:** The TRI chemical list includes over 600 chemicals and chemical categories. Periodically, there are changes to the list, so it's important to check for updates every year. There are no new chemical list changes specific to reporting year 2007. As for other pending changes – there is a chemical category addition under consideration. And petitions have been submitted for EPA to consider several other delistings. None of these are final at this point. They're just under consideration.
Slide 141 **Section X: TRI Program Information** Duration: 00:00:05		**Notes:**

Slide 142 **TRI Program Information** Duration: 00:01:03		**Notes:** TRI Program is developing a new online reporting option called TRI-MEweb. This is in addition to TRI-ME desktop software that many TRI covered facilities are familiar with and which is still available for download from the TRI website. TRI-MEweb is a web application that will have much the same functionality of the TRI-ME software and a number of new features. It will automatically populate current year forms, based on your last year's data, so you can start out with that information. It has enhanced data quality and error validation checks that will help to make sure you submit a clean and error-free report. And it has a few tools that you can use such as a Trends Analysis Report that allows you to compare your prior year submissions to the current year form. TRI-MEweb and regular TRI-ME software are both available from the TRI Website.
Slide 143 **TRI-ME Tutorials** Duration: 00:01:02		**Notes:** There are other tools available to assist you with your TRI reporting and using the TRI Made Easy software. Beginning this year, EPA has developed on-line tutorials to assist users with the new TRI-ME web application. The tutorials cover all of the steps needed to access, submit, and certify TRI forms using TRI-ME web. Beginning in reporting year 2005, EPA is providing TRI-ME tutorials. The tutorials walk you through the TRI reporting process using the TRI-ME desktop software. They are available from the EPA Website. In order to use them, you must have Internet access and a web browser and Macromedia Flash capability which you an also download from the Website shown here. There is audio along with the tutorials, so you would also need to have speakers or a headset.

Slide 144

Facility Data Profiles

Duration: 00:01:45



Notes:

Facilities that have filed in the past should be familiar with the Facility Data Profiles. This Profile is generated after the data processing center for TRI receives facilities' forms. After they enter the information into a database, they run various data validation steps, and then they produce a facility data profile.

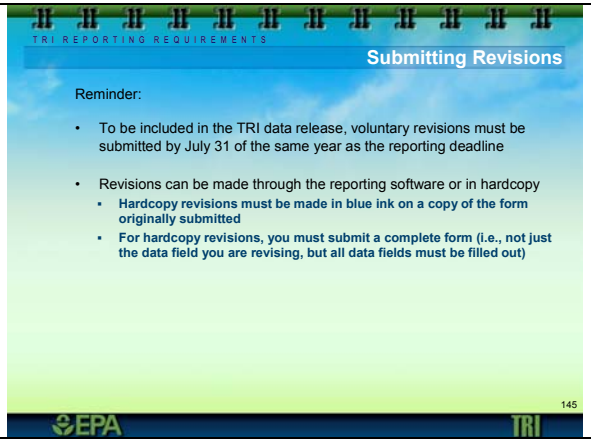
The Facility Data Profile has two purposes: First, it's also called an "echo back" because it echoes back to you the information that the data processing center entered. That gives facilities a chance to confirm that the data were entered correctly. Second, it identifies potential errors. Potential errors include: 1) non-technical errors, such as transposing a CAS number; or 2) technical errors, such as an invalid NAICS code; or 3) a significant error, which would be missing information like a chemical identifier, or the certifying signature. Facilities have 21 days to respond to significant errors pointed out in the Facility Data Profile.

Facilities can help ensure speedy receipt of their Facility Data Profiles by providing a technical contact email address on their TRI Forms and by filing electronically using the TRI-ME web or TRI-ME desktop applications. Facilities can use the telephone number, email address, and website shown here if they have any problems receiving or accessing their facility data profiles.

Slide 145

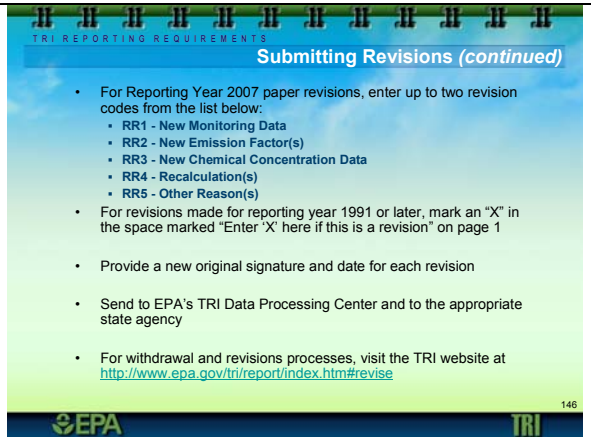
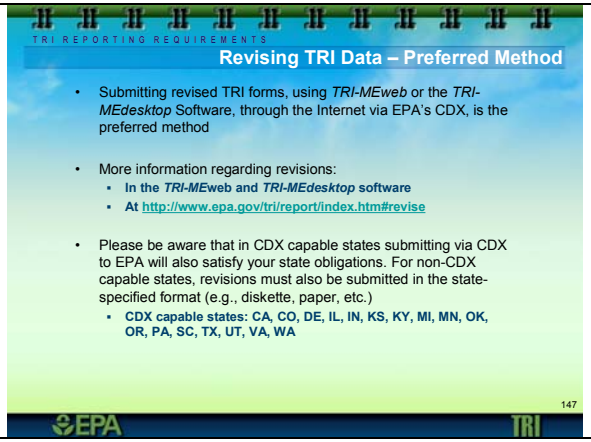
Submitting Revisions

Duration: 00:00:44

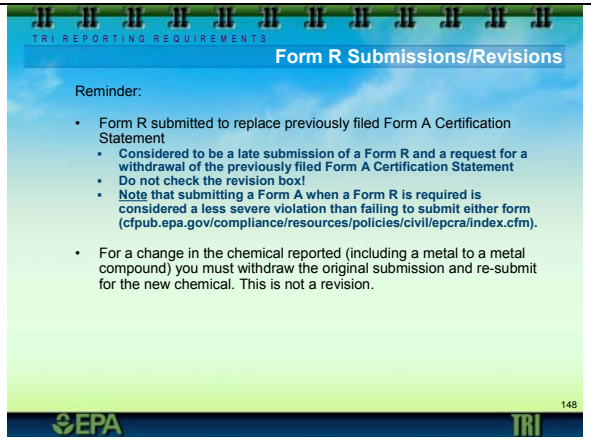


Notes:

Here are some reminders related to submitting TRI revisions. If, at any time, a facility finds there has been a reporting error, they can submit a revision. If it is a recent error, it can be corrected before the public release of the TRI data for that year if it is submitted by July 31st of the same year that the original report was submitted. If the revision is submitted after that, the revision will still go through; however, it would likely show up in subsequent data releases. Revisions can be made through the TRI-ME desktop and TRI-ME web applications, or in hardcopy, with the TRI-ME software being the preferred method.

Slide 146 **Submitting Revisions (continued)** Duration: 00:00:45		**Notes:** To make a revision, you must submit a new complete form, not just the data field you are revising. For paper submittals, prior to reporting year 2007, there is a check box to indicate that this is a revision that is being submitted. For 2007, facilities will enter up to two of the revisions codes shown here indicating the reason for the revision. Facilities need to re-certify each revision submission and they need to be submitted to EPA's Data Processing Center and to the appropriate state agency. Additional information on revisions, and also on withdrawing data, are available on the TRI website.
Slide 147 **Revising TRI Data – Preferred Method** Duration: 00:00:32		**Notes:** The preferred method for submitting revisions is electronically using the TRI-ME software through the Internet via EPA's central data exchange. Be aware that when submitting via the central data exchange to EPA, it will satisfy your state obligations only for states that are CDX-capable shown here. For states that are not yet CDX-capable, facilities must remember to also submit the revision to the state, such as on a diskette or hardcopy.

Slide 148
Form R Submissions/Revisions
Duration: 00:00:53



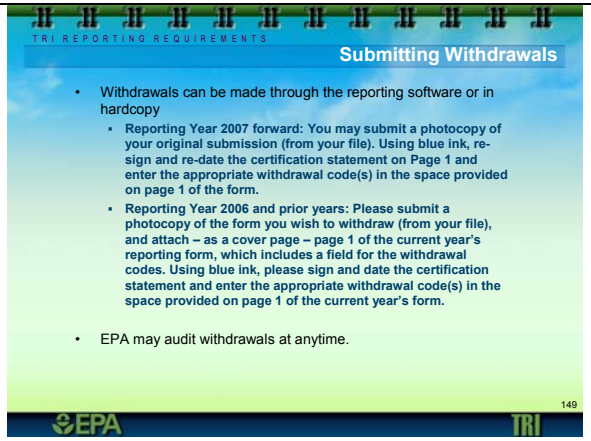
Notes:

Here are a few more reminders regarding revisions and withdrawals. If submitting a Form R to replace a previously filed Form A, this is not considered a revision (do not check the revision box). It is considered a late submission of Form R. You would also need to request that the Form A be withdrawn.

Note that submitting a Form A when a Form R is required is considered a less severe violation than failing to submit either form, but it is considered a late submission.

A common revision is to change the chemical reported from a metal to a metal compound or vice versa. In that case the original submission must be withdrawn and the form for the new chemical should be submitted. This is not considered a revision.

Slide 149
Submitting Withdrawals
Duration: 00:00:51



Notes:

Facilities can also withdraw TRI submittals if they learn that they were submitted in error. As with revisions, withdrawals can be made in hardcopy or via the TRI-ME software. If using paper, beginning in reporting year 2007, facilities must enter the appropriate withdrawal codes in the space provided on a copy of their original submission.

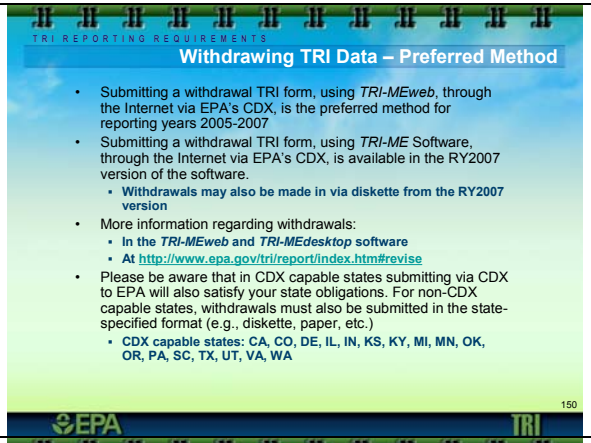
For withdrawals of data submitted for years prior to 2007, facilities must submit a copy of the original submission as well as a cover page consisting of page one of the current years reporting form, which includes the appropriate withdrawal codes in the space provided.

In both cases, the re-submission must be re-signed and certified.

Slide 150

Withdrawing TRI Data – Preferred Method

Duration: 00:00:34



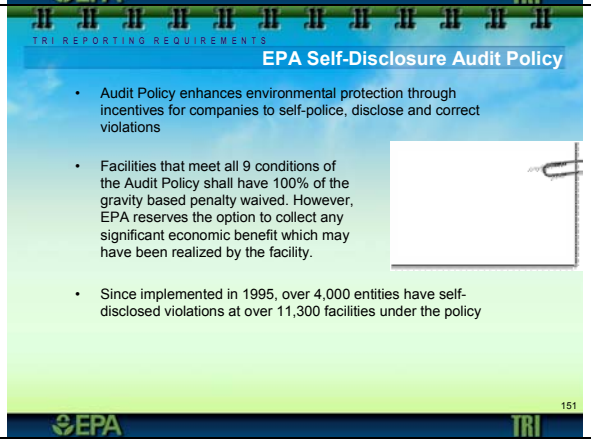
Notes:

As with submitting revisions, the preferred method for withdrawals is electronically via the central data exchange using the TRI-ME desktop or TRI-ME web software. Information on how to properly submit TRI data withdrawal requests can be obtained from the TRI-ME software applications or from the website shown here. As with revisions, submitting via the central data exchange will only fulfill state obligations for those states shown here that are CDX capable.

Slide 151

EPA Self-Disclosure Audit Policy

Duration: 00:00:39



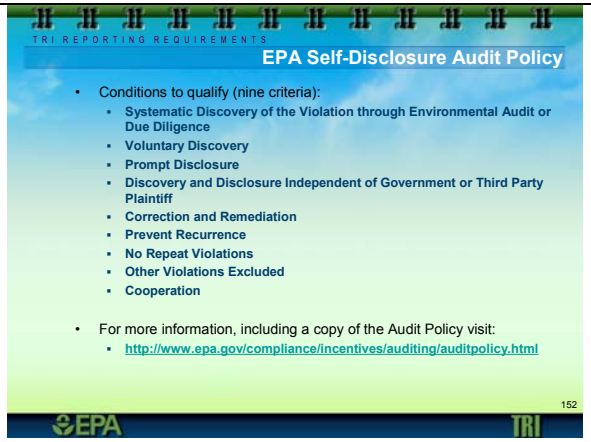
Notes:

Facilities should be aware that EPA's Audit Policy is available to those facilities that may not been reporting or reporting incorrectly in the past. The Audit Policy provides incentives for companies to do their own self-policing and disclose and correct violations. Companies that satisfy the policy's criteria could be eligible for up to 100% reduction in the otherwise applicable penalties. The Audit Policy has been used by many facilities and companies over the years and many times for the purposes of TRI's reporting requirements.

Slide 152

EPA Self-Disclosure Audit Policy

Duration: 00:00:60



Notes:

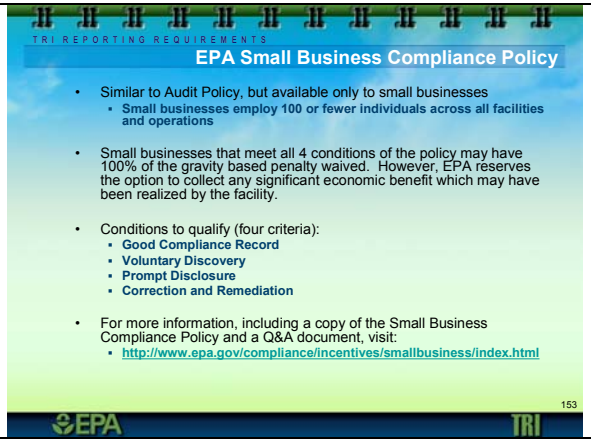
Conditions to qualify for the Audit Policy are as follows. The violation had to be from a systematic discovery through an environmental audit or due diligence. It has to have been a voluntary discovery made by the facility. The facility must promptly disclose the violation to the Environmental Protection Agency and the discovery disclosure must be independent of a government or third party plaintiff.

The facility must fix the problem to prevent it from recurring and this audit policy cannot be used to repeatedly for the same violations. It only covers the violations for which you are reporting. If other violations are identified over the course of using the audit policy, they may not be covered. You have to cooperate fully with the EPA and other authorities. More details on the audit policy are available from the EPA Website at the address shown here.

Slide 153

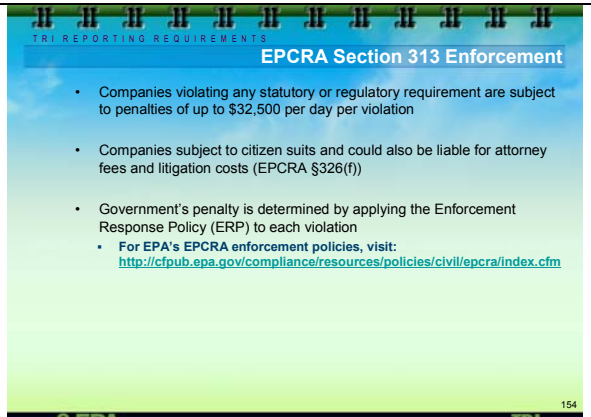
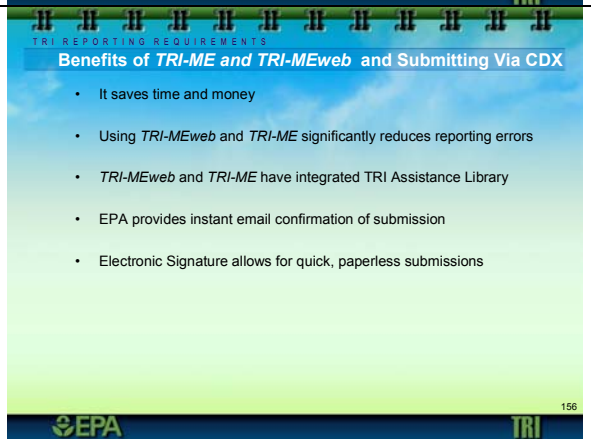
EPA Small Business Compliance Policy

Duration: 00:00:47

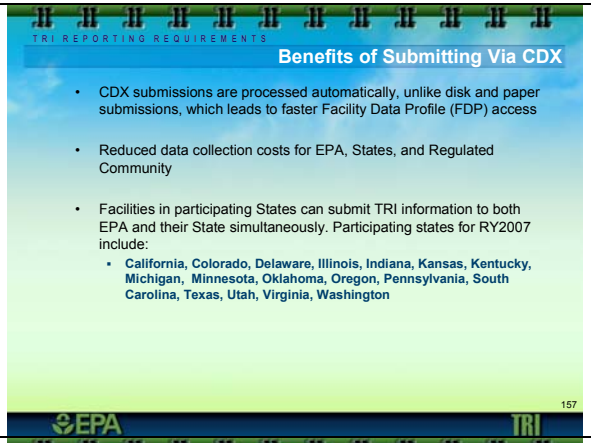


Notes:

EPA also has another option available to small businesses that self disclose violations. The Small Business Compliance Policy is similar to the Audit Policy, but it has fewer conditions and is only available to business with 100 or fewer employees. If a small business meets the conditions, they may be eligible for 100 percent reduction in the gravity based penalty. The conditions to qualify are: a good compliance record, voluntary discovery of the violation, prompt disclosure, and correction and remediation of the violation. More information on the Small Business Compliance Policy can be found at the website shown here.

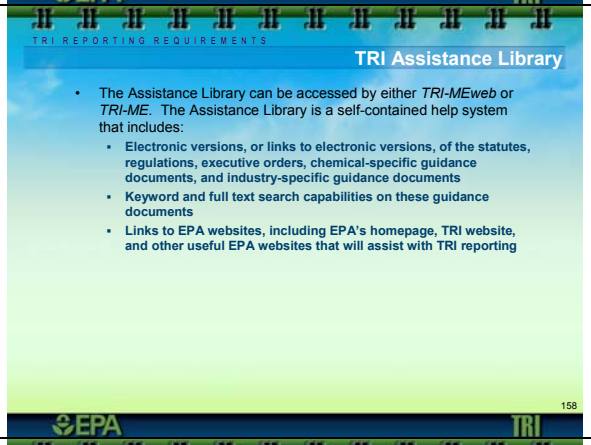
Slide 154 **EPCRA Section 313 Enforcement** Duration: 00:00:25		**Notes:** Companies violating any statutory or regulatory requirement are subject to penalties of up to $32,500 per day per violation. The government's Enforcement Response Policy is what is used to determine what the penalty will be. More information on EPA EPCRA enforcement policies can be found at the website shown here.
Slide 155 **Section XI: Tools and Assistance** Duration: 00:00:05		**Notes:**
Slide 156 **Tools and Assistance** Duration: 00:00:53		**Notes:** EPA would like to encourage the use of TRI-ME desktop and TRI-ME web reporting applications and the submittal of TRI reports via EPA's Central Data Exchange. It saves time and money for the reporting facilities and for the EPA. Both TRI-ME desktop and TRI-ME web have the TRI assistance library integrated within the software so that facilities have ready access to information and guidance. Using the TRI-ME software has been proven to significantly reduce reporting errors. When submitting via the CDX, facilities receive instant e-mail confirmation that EPA has received their submission. And submitting via the CDX uses an electronic signature that will allow for paperless submission.

Slide 157
Benefits of Submitting Via CDX
Duration: 00:00:32



Notes:
Submissions via the CDX are processed automatically, unlike the disk and paper submission, which means you receive your facility data profile much faster. Again, it reduces the cost of data collections for EPA, the state, as well as facilities and companies that need to report to TRI. For facilities in those states that are CDX capable, a submittal of their TRI forms to EPA automatically fulfills their state obligations.

Slide 158
TRI Assistance Library
Duration: 00:00:40

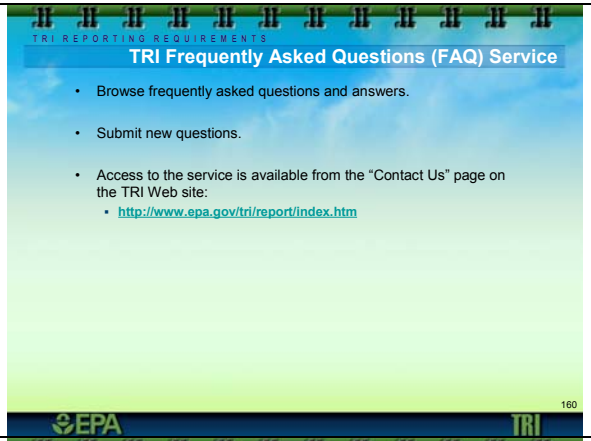


Notes:
TRI reporters should also be aware of the usefulness of TRI Assistance Library. The Assistance Library is contained within the TRI Made Easy software and can be downloaded from the TRI website. The self-contained help system includes electronic versions or electronic links to the electronic version of all the statutes, regulations, and guidance documents available through the TRI program's Website. Because it is all electronic, it offers full-text keyword searching and links to the TRI home page and other useful EPA websites.

Slide 159
TRI Reporting Materials
Duration: 00:00:19

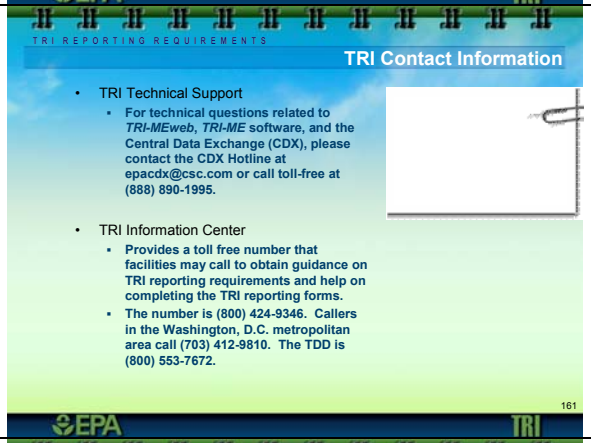
Notes:
The TRI Assistance Library, as accessed through the TRI-ME web and TRI-ME desktop applications provides access to the TRI guidance documents and the on-line tutorials and training modules. This information can also be accessed through the TRI website shown here.

Slide 160
TRI Frequently Asked Questions (FAQ) Service
Duration: 00:00:21



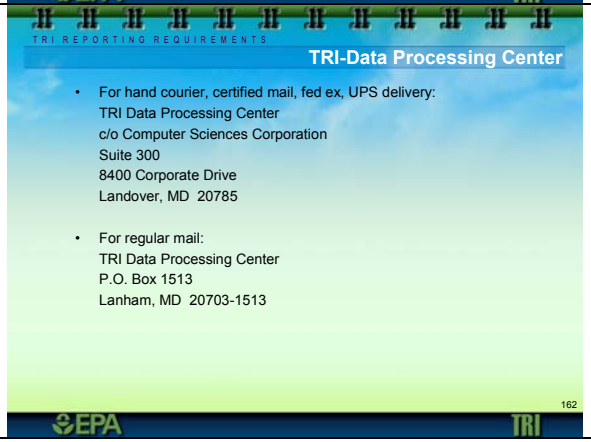
Notes:
Recently, the TRI Program has developed a Frequently Asked Questions Service. In addition to allowing facilities to browse past questions and answers, it also allows users to submit new questions and receive timely answers. This service new service can be accessed at the website shown here.

Slide 161
TRI Contact Information
Duration: 00:00:20



Notes:
If you want more information about TRI-ME web, TRI-ME desktop, and the central data exchange, please use the CDX hotline and email address shown here. For information on TRI in general, facilities can call the TRI information center at the numbers shown here.

Slide 162
TRI-Data Processing Center
Duration: 00:00:19



Notes:
If you need to send something by courier or certified mail, or by FedEx or UPS to the TRI Data Processing Center, use the address shown here. If you're sending something via regular mail to the TRI Data Processing Center, send it to the post office box shown here.

Slide 163 **To be continued…** Duration: 00:00:53		**Notes:** This concludes the Basic Concepts Module of the TRI Online Training. On-line tutorials for using the TRI-ME web and TRI-ME desktop applications can be accessed from the TRI homepage at www.epa.gov/tri. Also, the Advanced Concepts module of this Online Training course is also available from the TRI homepage. The Advanced Concepts module assumes a basic understanding of the TRI program requirements. It reviews some of the basic concepts and also focuses on key concepts that will help to ensure accurate TRI reporting, including guidance on reporting exemptions, threshold determinations, chemicals with special requirements, and more on the recent changes to the TRI program.
Slide 164 **End of Module** Duration: 00:00:05		**Notes:**